CHAPTER 1 ADMINISTRATION

Delete the existing language of Chapter 1 in its entirety and insert the following sections, R101.1 through R114.2.

SECTION R101 GENERAL

R101.1 Title. These provisions shall be known as the "Kentucky Residential Code 2002" hereinafter referred to as "this code."

R101.2 Scope. The provisions of *this code* shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one-and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories in height with a separate means of egress and their accessory structures.

Exception: Farm dwellings and other buildings and structures located on farms which are incident to the operation of the farm and located outside the boundary of a municipality; but only if they are not used in the business of retail trade, as a regular place of work for 10 or more people or for the processing or storage of timber products.

Exception: Manufactured homes constructed under federal HUD standards. However, the exterior electric, water and sewer connections and additions to the home are not exempt.

Exception: Swimming Pools constructed completely above grade.

R101.3Intent. The purpose of *this code* is to establish the minimum requirements to safeguard the public health, life or limb, health and public welfare.

R101.4 Other Residential buildings. Multiple single-family dwellings (townhouses) over three stories in height or more or without separate entrances shall comply with the *Kentucky Building Code*.

R101.5 Accepted practices. In the absence of provisions not specifically contained in *this code* or final decisions of the appeals board, the specifications and standards listed in Chapter 43 shall be deemed to represent accepted engineering practice with respect to materials, equipment, system or method of construction as specified and shall be acceptable.

R101.6 Licensed HVAC contractors. All work involving HVAC as defined and required by KRS Chapter 198B shall be provided by a licensed Journeyman HVAC Mechanic working under the supervision of a licensed Master HVAC Contractor. The code official may require proof of licensure when making inspections.

SECTION R102 APPLICABILITY

R102.1General. Where, in any specific case, different sections of *this code* specify different materials, methods of construction or other requirements, the most restrictive shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable;

except that where a provision of *this code* or the standards adopted by reference herein and the provisions of this Chapter, this chapter shall supersede all other requirements.

- **R102.2** Other laws. Other local or state law shall be consulted to determine the existence of other powers given to the code official, such as those related to demolition or authority over unsafe structures; however, no local ordinance shall establish any additional or contradictory building construction standard than those adopted in *this code*.
- **R102.3 Application of references.** References to chapter or section numbers, or to provisions not specifically identified by number, shall be construed to refer to such chapter, section or provision of *this code*.
- **102.4 Referenced codes and standards.** The codes and standards referenced in *this code* shall be considered part of the requirements of *this code* to the prescribed extent of each such reference. Where differences occur between provisions of *this code* and referenced codes and standards, the provisions of *this code* shall apply; and newer editions of any standards may be used to meet the intent of the code in lieu of the adopted edition.

Exception: Where enforcement of a code provision would violate the conditions of the listing of the equipment or appliance, the conditions of the listing and manufacturer's instructions shall apply.

- **R102.5** Appendices. Provisions in the appendices shall not apply.
- **R102.6 Partial invalidity.** In the event any part or provision of *this code* is held to be illegal or void, this shall not have the effect of making void or illegal any of the other parts or provisions.
- **R 102.7 Plumbing.** The provisions of the *Kentucky State Plumbing Code* shall apply to the installation, alteration, repair and replacement of plumbing systems, including equipment, appliances, fixtures, fittings and appurtenances. All plumbing installations shall be installed under the supervision of a Kentucky Licensed Master Plumber according to law and shall be inspected and approved by the state plumbing inspector prior to usage.
- **R102.8** Electrical. The electrical system shall be installed in conformity with the *National Electrical Code*, 1999 Edition; and the inspection of electrical installations shall be performed by a Certified electrical Inspector pursuant to 815 KAR 35:015.
- **R102.9 Gas.** In every instance in which the *International Fuel Gas Code* is referenced, it shall be replaced with the *National Fuel Gas Code*, *NFPA 54*.
- **R102.10** Kentucky Building Code. In every instance in which the *International Building Code* is referenced, it shall be replaced with the 2002 Kentucky Building Code.
- **R102.11** Moved Structures. Buildings and structures moved into or within the Commonwealth shall comply with the provisions of *this code* for new buildings and structures and shall not be used or occupied until the certificate of occupancy has been issued by the code official. This provision does not apply to manufactured homes.

- **R102.12 Existing structures.** The legal occupancy of any structure existing on the date of adoption of *this code* shall be permitted to continue without change, except as is specifically covered in *this code*, or as is deemed necessary by the building official for the general safety and welfare of the occupants and the public.
- **R102.13 Existing conditions.** Nothing in the code shall be interpreted to require that additions or remodeling of any part of a dwelling shall require retrofitting or upgrading existing conditions which are not being altered.
- **R102.14** Additions, Alterations and Repairs. Changes to a structure shall conform to that required for a new structure without requiring the existing structure to comply with all the requirements of *this code*, unless otherwise stated. Additions, alterations or repairs shall not cause an existing structure to become unsafe or adversely affect the performance of the building.

SECTION R103 ESTABLISHMENT OF A BUILDING CODE PROGRAM

- **R103.1 Creation of enforcement agency.** The department of building inspection is hereby created and the official in charge thereof shall be known as the building official.
- **R103.2 Appointment.** The chief appointing authority of the jurisdiction shall appoint the building official and the Department of Housing, Buildings and Construction shall certify the official.
- **R103.3 Enforcement personnel.** In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the building official shall have the authority to appoint trainees and other certified inspectors as necessary. Such employees shall have powers as allowed by law and delegated by the building official.
- **R103.4** Certified Inspectors. The local government shall provide at least one Kentucky Certified Building Inspector, Level I, pursuant to 815 KAR 7:070, and a certified electrical inspector, certified according to 815 KAR 35:015. The local government shall report the name of all inspectors to the Department and the Department shall be notified of any changes in inspector personnel.
- **R103.5 General Authority.** The building official is hereby authorized and directed to enforce the provisions of *this code*. The building official shall have the authority to render interpretations of *this code* and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of *this code*. Such policies and procedures shall not have the effect of waiving requirements specifically provided for in *this code*.
- **R103.6 Applications and permits.** The building official shall receive applications, review construction documents and issue permits for the erection, and alteration and moving of buildings and structures, inspect the premises for which such permits have been issued and enforce compliance with the provisions of *this code*.

R103.7 Notices and orders. The building official shall issue all necessary notices or orders to ensure compliance with *this code*.

R103.8 Alternative materials, design and methods of construction and equipment. The provisions of *this code* are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by *this code*, provided that any such alternative has been approved. An alternative material, design or method of construction shall be approved where the building official finds that the proposed design is satisfactory and complies with the intent of the provisions of *this code*, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this co-de in quality, strength, effectiveness, fire resistance, durability and safety.

R103.9 Tests. Whenever there is insufficient evidence of compliance with the provisions of *this code*, or evidence that a material or method does not conform to the requirements of *this code*, or in order to substantiate claims for alternative materials or methods, the building official shall have the authority to require tests as evidence of compliance to be made at no expense to the jurisdiction. Test methods shall be as specified in *this code* or by other recognized test standards. In the absence of recognized and accepted test methods, the building official shall approve the testing procedures. Tests shall be performed by an approved agency. Reports of such tests shall be retained by the building official for the period required for retention of public records as promulgated by the Kentucky Department of Libraries and Archives pursuant to KRS 171.450.

R103.10 Rule making authority. By means of the board's appeals procedures, the board may issue orders which shall be binding upon the Appellant and the code official, and the code official shall implement the provisions of *this code* to secure its intent as determined by the board.

R103.11 Nonstructural repairs. Nonstructural alterations or repairs, which do not adversely affect a structural member having a required fire-resistance rating, may be made with the same materials of which the structure was constructed.

SECTION R104 LOCAL BOARD OF APPEAL

R104.1Local appeals board. Local appeals boards may be appointed to hear appeals from the decisions of the local code official in accordance with the provisions of R104.1.1 through R104.1.4.

R104.1.1 Appointment. The mayor or county judge executive of a local government which is enforcing the *Kentucky Building Code* may, upon approval of the local legislative body, appoint a local appeals board, consisting of at least five technically qualified persons with professional experience related to the building industry, three of which shall not be employees of the local government, to hear appeals from the decisions of the local code official regarding building code requirements.

R104.1.2 Cooperative agreements. Local governments which are enforcing the *Kentucky Residential Code* may cooperate with each other and provide a local appeals board and shall adhere to the provisions of KRS Chapter 65 when entering into a cooperative agreement.

- **R104.1.3 Disqualification of member.** Local code officials or employees of a local inspection department shall not sit on a local appeals board if the board is hearing an appeal to a decision rendered by the local department. A member of a local appeals board shall not hear an appeal in a case in which the member has a financial interest.
- **R104.1.4 Right to appeal.** Any party to a decision by the local code official may appeal that decision to the local appeals board. Upon receipt of an appeal from a qualified party, the local appeals board shall convene a hearing to consider the appeal within 15 days of receipt.
- **R104.2 Notice of meeting.** All parties to the appeal shall be notified of the time and place of the hearing by letter sent by certified mail not later than ten days prior to the date of the hearing.
- **R104.3 Board decision.** The local appeals board shall render a decision within five working days after the hearing. The board may uphold, amend or reverse the decision of the local code official, and there shall be no appeal from the decision of the local appeals board other than by appeal to the Board of Housing, Buildings and Construction.
- **R104.4Open hearing.** All hearings before the board shall be open to the public. The appellant, the appellant's representative, the code official and any all persons whose interests are affected shall be given an opportunity to be heard.
 - **R104.4.1 Procedure.** The board shall adopt and make available to the public through the secretary procedures under which a hearing will be conducted. The procedures shall not require compliance with strict rules of evidence but shall mandate that only relevant information is received.
- **104.5 Board decision.** The board shall modify or reverse the decision of the code official by a concurring vote of three members.

SECTION R105 PERMITS

- **R105.1 Required.** Any owner or authorized agent who intends to construct, enlarge, remodel or change the occupancy of a building, or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by *this code*, or to cause any such work to be done, shall first make application to the building official and obtain the required permit.
 - **R105.1.1Annual permit.** In lieu of an individual permit for each alteration to an already approved electrical, gas, mechanical or plumbing installation, the building official is authorized to issue an annual permit upon application therefor to any person, firm or corporation regularly employing one or more qualified trade persons in the building, structure or on the premises owned or operated by the applicant for the permit.
 - **R105.1.2** Annual permit records. The person to whom an annual permit is issued shall keep a detailed record of alterations made under such annual permits The building official shall have access to such records at all times or such records shall be filed with the building official as designated.

R105.2Work exempt from permit. Exemptions from permit requirements of *this code* shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of *this code* or any other laws or ordinances of this jurisdiction. Permits shall not be required for the following:

Building:

- 1. One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 120 square feet (11.15 m²).
- 2. Fences not over 6 feet (1829 mm) high.
- 3. Sidewalks and driveways not more than 30 inches (762 mm) above grade and not over any basement or story below and which are not part of an accessible route.
- 4. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
- 5. Shade cloth structures constructed for nursery or agricultural purposes and not including service systems.
- 6. Swings and other playground equipment accessory to one- and two-family dwellings.
- 7. Window awnings supported by an exterior wall.

Electrical:

Repairs and maintenance. Minor repair work, including the replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles.

Radio and television transmitting stations. The provisions of *this code* shall not apply to electrical equipment used for radio and television transmissions.

Temporary testing systems. A permit shall not be required for the installation of any temporary system required for the testing or servicing of electrical equipment or apparatus.

Gas:

- 1. Portable heating appliance.
- 2. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.

Mechanical:

- 1. Portable heating appliance;
- 2. Portable ventilation equipment;
- 3. Portable cooling unit;
- 4. Steam, hot or chilled water piping within any heating or cooling equipment regulated by *this code*;
- 5. Replacement of any part which does not alter its approval or make it unsafe;
- 6. Portable evaporative cooler;
- 7. Self-contained refrigeration system containing 10 pound (4.54 kg) or less of refrigerant and actuated by motors of 1 horsepower (746 W) or less.

R105.2.1 Emergency repairs. Where equipment replacements and repairs must be performed in an emergency situation, the permit application shall be submitted within the next working business day to the building official.

- **R105.2.2** Repairs. Application or notice to the building official is not required for ordinary repairs to structures, replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles. Such repairs shall not include the cutting away of any wall, partition or portion thereof, the removal or cutting of any structural beam or load bearing support, or the removal or change of any required means of egress, or emergency escape windows, or rearrangement of parts of a structure affecting the egress requirements; nor shall ordinary repair include addition to, alteration of, replacement or relocation of any standpipe, water supply, sewer, drainage, drain leader, gas, soil, waste, vent or similar piping, electric wiring or mechanical or other work affecting public health or general safety.
- **R105.2.3 Public service agencies.** A permit shall not be required for the installation, alteration or repair of generation, transmission, distribution or metering or other related equipment that is under the ownership and control of public service agencies by established right.
- **R105.3 Application for permit.** To obtain a permit, the applicant shall first file an application therefor in writing on a form furnished by the department of building inspection for that purpose. Such application shall:
 - 1. Identify and describe the work to be covered by the permit for which application is made.
 - 2. Describe the land on which the proposed work is to be done by legal description, street address or similar description that will readily identify and definitely locate the proposed building or work. New buildings or additions shall be accompanied by a copy of the current site survey bearing the seal and signature of a Kentucky Registered Land Surveyor, except the code official may, at the official's discretion, accept other proof of location.
 - 3. Indicate the use and occupancy for which the proposed work is intended.
 - 4. Be accompanied by construction documents and other information as required in Section 106.3.
 - 5. Give such other data and information as required by the building official.
 - **R105.3.1** Action on application. The building official shall examine or cause to be examined applications for permits and amendments thereto within a reasonable time after filing. If the application or the construction documents do not conform to the requirements of pertinent laws, the building official shall reject such application in writing, stating the reasons therefor. If the building official is satisfied that the proposed work conforms to the requirements of *this code* and laws and ordinances applicable thereto, the building official shall issue a permit therefor as soon as practicable.
 - **R105.3.2** Time limitation of application. An application for a permit for any proposed work shall be deemed to have been abandoned 180 days after the date of filing, unless such application has been pursued in good faith or a permit has been issued; except that the building official is authorized to grant one or more extensions of time for additional periods not exceeding 90 days each. The extension shall be requested in writing and justifiable cause demonstrated.
- **R105.4 Validity of permit.** The issuance or granting of a permit shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of *this code* or of any other ordinance of the jurisdiction. Permits presuming to give authority to violate or cancel the provisions of *this code* or other

ordinances of the jurisdiction shall not be valid. The issuance of a permit based on construction documents and other data shall not prevent the building official from requiring the correction of efforts in the construction documents and other data. The building official is also authorized to prevent occupancy or use of a structure where in violation of *this code* or of any other ordinances of this jurisdiction.

R105.5 Expiration. Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within 180 days after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. The building official is authorized to grant, in writing, one or more extensions of time, for periods not more than 180 days each. The extension shall be requested in writing and justifiable cause demonstrated.

R105.6Suspension or revocation. The building official is authorized to suspend or revoke a permit issued under the provisions of *this code* wherever the permit is issued in error or on the basis of incorrect, inaccurate or incomplete information, or in violation of any ordinance or regulation or any of the provisions of *this code*.

R105.7 Placement of permit. The building permit or copy shall be kept on the site of the work until the completion of the project.

SECTION R106 CONSTRUCTION DOCUMENTS

R106.1 Submittal documents. One set of Construction documents, special inspection and structural observation programs, and other data shall be submitted with each application for a permit. Additional plans and documents may be required by the Kentucky Division of Plumbing or by bcal ordinance for buildings under local plan review jurisdiction. Construction documents involving the practice of professional architecture or engineering, as defined by KRS Chapters 322 and 323, shall be prepared by and bear the seal of a Kentucky-licensed design professional. Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by a registered design professional.

Exception: The building official is authorized to waive the submission of construction documents and other data not required to be prepared by a registered design professional if it is found that the nature of the work applied for is such that reviewing of construction documents is not necessary to obtain compliance with *this code*.

R106.1.1 Information on construction documents. Construction documents shall be dimensioned upon suitable material. Electronic media documents are permitted to be submitted when approved by the building official. Construction documents shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of *this code* and relevant laws, ordinances, rules and regulations, as determined by the building official.

R106.1.2 Manufacturer's installation instructions. Manufacturer's installation instructions, as required by *this code*, shall be available on the job site at the time of inspection.

R106.1.3 Information for construction in areas prone to flooding. For buildings and structures in flood hazard areas as established by Table R301.2(1), construction documents shall include:

- 1. Delineation of flood hazard areas, floodway boundaries, and flood zones, and the design flood elevation, as appropriate;
- 2. The elevation of the proposed lowest floor, including basement; in areas of shallow flooding (AO zones), the height of the proposed lowest floor, including basement, above the highest adjacent grade; and
- **3.** If design flood elevations are not included on the community's Flood Insurance Rate Map(FIRM), the building official and the applicant shall obtain and reasonably utilize any design flood elevation and floodway data available from other sources.

R106.2Site plan. The construction documents submitted with the application for permit shall be accompanied by a site plan showing to scale the size and location of new construction and existing structures on the site, distances from lot lines, the established street grades and the proposed finished grades; and it shall be drawn in accordance with an accurate boundary line survey. In the case of demolition, the site plan shall show construction to be demolished and the location and size of existing structures and construction that are to remain on the site or plot. The building official is authorized to waive or modify the requirement for a site plan when the application for permit is for alteration or repair or when otherwise warranted.

R106.3 Examination of documents. The building official shall examine or cause to be examined the accompanying construction documents and shall ascertain by such examinations whether the construction indicated and described is in accordance with the requirements of *this code*.

R106.3.1 Approval of construction documents. Construction documents shall be approved, in writing or by stamp, as "Reviewed for Code Compliance" or "Released for Construction" The construction documents that have been approved or released for construction shall be kept at the site of work and shall be open to inspection by the building official or his authorized representative.

R106.3.2 Previous approvals. This code shall not require changes in the construction documents, construction or designated occupancy of a structure for which a lawful permit has been heretofore issued or otherwise lawfully authorized, and the construction of which has been pursued in good faith within 180 days after the effective date of *this code* and has not been abandoned.

R106.3.3 Phased approval. The building official is authorized to issue a permit for the construction of foundations or any other part of a building or structure before the construction documents for the whole building or structure have been submitted, provided that adequate information and detailed statements have been filed complying with pertinent requirements of *this code*. The holder of such permit for the foundation or other parts of a building or structure shall proceed at the holder's own risk with the building operation and without assurance that a permit for the entire structure will be granted.

R106.4 Amended construction documents. Work shall be installed in accordance with the reviewed construction documents, and any changes made during construction that are not in compliance with the approved construction documents shall be resubmitted for approval as an amended set of construction documents.

R106.5 Retention of construction documents. The building official, as required by the Kentucky Department of Archives administrative regulations, shall retain approved construction documents.

SECTION R107 TEMPORARY STRUCTURES AND USES

- **R107.1General.** The building official is authorized to issue a permit for temporary structures and temporary uses. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The building official is authorized to grant extensions for demonstrated cause.
- **R107.2 Conformance.** Temporary structures and uses shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of *this code* as necessary to ensure the public health, safety and general welfare.
- **R107.3 Temporary power.** The building official with the agreement of the certified electrical inspector is authorized to give permission to temporarily supply and use power in part of an electric installation before such installation has been fully completed and the final certificate of completion has been issued. The part covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat or power in the National Electrical Code.
- **R107.4Termination of approval.** The building official is authorized to terminate such permit for a temporary structure or use and to order the temporary structure or use to be discontinued.

SECTION R108 FEES

- **R108.1Payment of fees.** A permit or letter of permission to begin construction shall not be valid until the applicable fees prescribed by local ordinance have been paid. Nor shall an amendment to a permit be released until the additional fee, if any, has been paid.
- **R108.2** Work commencing before permit issuance. Any person who commences any work on a building, structure, electrical, gas, mechanical or plumbing system before obtaining the necessary permits shall be subject to an additional fee established by the building official which shall be in addition to and equal in the amount of the original fees.
- **R108.3 Related fees.** The payment of the fee for the construction, alteration, removal or demolition for work done in connection with or concurrently with the work authorized by a building permit shall not relieve the applicant or holder of the permit from the payment of other fees that are prescribed by law.
- **R108.4Refunds.** The building official is authorized to establish a refund policy.
- **R108.5** Accounting. The code official shall keep an accurate account of all fees collected and such collected fees shall be deposited monthly in the jurisdiction treasury, or otherwise disposed of as required by law.

SECTION R109 INSPECTIONS

- **R109.1 General.** Construction or work for which a permit is required shall be subject to inspection by the building official and such construction or work shall remain accessible and exposed for inspection purposes until approved. Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of *this code* or of other ordinances of the jurisdiction. Inspections presuming to give authority to violate or cancel the provisions of *this code* or of other ordinances of the jurisdiction shall not be valid. It shall be the duty of the permit applicant to cause the work to remain accessible and exposed for inspection purposes. Neither the building official nor the jurisdiction shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.
 - **R109.1.1** On-site Inspections. From time to time the building official, upon notification from the permit holder or his agent, shall make or cause to be made any necessary inspections and shall either approve that portion of the construction as completed or shall notify the permit holder or his or her agent wherein the same fails to comply with *this code*.
- **R109.2Preliminary inspection.** Before issuing a permit, the building official is authorized to examine or cause to be examined buildings, structures and sites for which an application has been filed.
- **R109.3 Construction Phases.** The building official may make inspections from time to time and according to local ordinance in consideration of the following various construction phases.
 - **R109.3.1 Footing or foundation inspection.** Footing and foundation inspections are appropriate after excavations for footings are complete and any required reinforcing steel is in place. For concrete foundations, any required forms shall be in place prior to inspection approval. Materials for the foundation shall be on the job, except where concrete is ready mixed in accordance with ASTM C 94, the concrete need not be on the job.
 - **R109.3.2** Concrete slab or under-floor inspection. Concrete slab and under-floor inspections shall be made after in-slab or under-floor reinforcing steel and building service equipment, conduit, piping accessories and other ancillary equipment items are in place, but before any concrete is placed or floor sheathing installed, including the subfloor.
 - **R109.3.3Lowest floor elevation.** The elevation certification required in Section R1612.5 shall be submitted to the building official.
 - **R109.3.4 Frame inspection.** Framing inspections shall be made after the roof deck or sheathing, all framing, fire blocking and bracing are in place and pipes, chimneys and vents to be concealed are complete and the rough electrical, plumbing, heating wires, pipes and ducts are approved.
 - **R109.3.5Lath or gypsum board inspection.** Lath and gypsum board inspections shall be made after lath and gypsum board, interior and exterior, is in place, but before any plastering is applied or before gypsum board joints and fasteners are taped and finished.

Exception: Gypsum board that is not part of a fire-resistive assembly or a shear assembly.

- **R109.3.6 Fire-resistant penetrations.** Protection of joints and penetrations in fire-resistance-rated assemblies shall not be concealed from view until inspected and approved.
- **R109.3.7 Energy efficiency inspections.** Inspections may be made to determine compliance with envelope insulation R and U value, fenestration U value, duct system R value, and HVAC and water heating equipment efficiency.
- **R109.3.8Other inspections.** In addition to the inspections specified above, the building official is authorized to make or require other inspections of any construction work to ascertain compliance with the provisions of *this code* and other laws that are enforced by the department of building safety.
- **R109.4Inspection agencies.** The building official is authorized to accept reports of approved inspection agencies, provided such agencies satisfy the requirements as w qualifications and reliability.
- **R109.5 Inspection requests.** It shall be the duty of the holder of the building permit or their duly authorized agent to notify the building official when work is ready for inspection at the various stages. It shall be the duty of the permit holder to provide access to and means for inspection of such work for the inspections.
- **R109.6 Approval required.** Work shall not be done beyond the point indicated in each successive inspection without the approval of the building official. The building official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or shall notify the permit holder or an agent of the permit holder wherein the same fails to comply with *this code*. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the building official.
- **R109.7** Industrialized building system inspections. The inspection of all buildings classified as industrialized building systems, regardless of size or occupancy classification, shall be in accordance with this section.
 - **R109.7.1 Off-site construction.** In-plant inspections in production and manufacturing facilities for industrialized building systems as well as on-site inspection for all industrialized building systems, except those classified as detached one- and two-family dwellings as indicated in Section 109.7.2, shall be conducted by the department or its authorized agent. The local code official shall be responsible for inspection of these systems for zoning, water supply and sewage disposal, and other applicable local ordinance purposes.
 - **R109.7.2** On-site construction. On-site construction related to modular homes or one- and two-family dwelling installations may be permitted and inspected by the local code official having jurisdiction. The local code official having jurisdiction shall be responsible for inspection of the foundation system, placement of the building, connection of the units, final set-up of the units and issuance of the certificate of occupancy.
- **R109.8** Final Inspections. Upon completion of the building, the owner or agent of the facility shall request a final inspection. The code official shall set a time for the inspection and notify the owner or agent. If substantial compliance with the approved construction documents and permit has been achieved,

a certificate of occupancy shall be issued, as described in Section R110.0. If compliance has not been achieved, violations of the approved construction documents and permit shall be noted and immediately communicated to the owner, agency and other person holding the permit. It shall be the owner's responsibility and the responsibility of the person responsible for the construction work to fulfill any compliance deficiencies noted.

SECTION R110 CERTIFICATE OF OCCUPANCY

R110.1Use and occupancy. No building or structure shall be used or occupied, and no change in the existing occupancy classification of a building or structure or portion thereof shall be made until the building official has issued a certificate of occupancy therefor as provided herein. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of *this code* or of other ordinances of the jurisdiction.

R110.2Change in use. Changes in the character or use of an existing structure shall conform to the applicable requirements of *this code* or the *Kentucky Building Code*, 2002.

R110.3 Certificate issued. After the building official inspects the building or structure and finds no violations of the provisions of *this code* or other laws that are enforced by the department of building safety, the building official shall issue a certificate of occupancy that shall contain the following:

- 1. The building permit number.
- 2. The address of the structure.
- 3. The name and address of the owner.
- 4. A description of that portion of the structure for which the certificate is issued.
- 5. A statement that the described portion of the structure has been inspected for compliance with the requirements of *this code* for the occupancy and division of occupancy and the use for which the proposed occupancy is classified.
- 6 The name of the building official.
- 7. The edition of the code under which the permit was issued.
- 8. If an automatic sprinkler system is provided, whether the sprinkler system is required.
- 9. Any special stipulations and conditions of the building permit.

R110.4 Temporary occupancy. The building official is authorized to issue a temporary certificate of occupancy before the completion of the entire work covered by the permit, provided that such portion or portions shall be occupied safely. The building official shall set a time period during which the temporary certificate of occupancy is valid.

SECTION R111 SERVICE UTILITIES

R111.1 Connection of service utilities. No person shall make connections from a utility, source of energy, fuel or power to any building or system that is regulated by *this code* for which a permit is required, until released by the applicable licensed and certified persons listed in Section R111.4

- **R111.2Temporary connection.** The authority to authorize the temporary connection of the building or system to the utility source of energy, fuel or power shall be by the applicable licensed and certified persons listed in Section 111.4.
- **R111.3 Authority to disconnect service utilities.** The building official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by *this code* and the codes referenced in case of emergency where necessary to eliminate an immediate hazard to life or property. The building official shall notify the serving utility, and wherever possible the owner and occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner or occupant of the building, structure or service system shall be notified in writing, as soon as practical thereafter.
- **R111.4 Enforcement by local government.** The electrical system shall be inspected and approved by a certified electrical inspector pursuant to KRS 227.489 and 815 KAR 35:015. The plumbing system shall be inspected and approve pursuant to KRS Chapter 318 of the Kentucky Revised Statutes and the Kentucky State Plumbing Code as set out in Title 815, Chapter 20, Kentucky Administrative Regulations. Other permits and inspections of single family dwellings shall be performed only if required by local ordinance.

SECTION R112 VIOLATIONS

- **R112.1Unlawful acts.** It shall be unlawful for any person, firm or corporation to erect, construct, alter, extend, repair, move, remove, or occupy any building, structure or equipment regulated by *this code*, or cause same to be done, in conflict with or in violation of any of the provisions of *this code*.
- **R112.2 Notice of violation.** The building official is authorized to serve a notice of violation or order on the person responsible for the erection, construction, alteration, extension, repair, moving, removal, or occupancy of a building or structure in violation of the provisions of *this code*, or in violation of a permit or certificate issued under the provisions of *this code*. Such order shall direct the discontinuance of the illegal action or condition and the abatement of the violation.
- **R112.3 Prosecution of violation.** If the notice of violation is not complied with promptly, the building official is authorized to request the legal counsel of the jurisdiction to institute the appropriate proceeding at law or in equity to restrain, correct or abate such violation, or to require the removal or termination of the unlawful occupancy of the building or structure in violation of the provisions of *this code* or of the order or direction made pursuant thereto.
- **R112.4 Violation penalties.** Any person who violates a provision of *this code* or fails to comply with any of the requirements thereof or who erects, constructs, alters or repairs a building or structure in violation of the approved construction documents or directive of the building official, or of a permit or certificate issued under the provisions of *this code*, shall be subject to penalties provided by KRS 198B.990 and other applicable law.

SECTION R113 STOP WORK ORDER

- **R113.1Authority.** Whenever the building official finds any work regulated by *this code* being performed in a manner contrary to the provisions of *this code* or in a dangerous or unsafe manner, the building official is authorized to issue a stop work order.
- **R113.2Issuance.** The stop work order shall be in writing and shall be given to the owner of the property involved, or to the owner's agent, or to the person doing the work. Upon issuance of a stop work order, the cited work shall immediately cease according to the time limitation on the order. The stop work order shall state the reason for the order, and the conditions under which the cited work will be permitted to resume.
- **R113.3 Unlawful continuance.** Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to penalties as prescribed by law.
- **R113.4 Limitation on changes.** No inspector shall be authorized to require changes on-site which are contrary to the approved construction documents. If an inspector finds a code discrepancy in an on-site inspection, the inspector shall refer the matter to the official having construction document review responsibility who shall require corrections if the code so requires.

SECTION R114 PROOF OF INSURANCE

- **R114.1 Compliance with law.** The issuance of a building permit shall be contingent upon presentation of proof to the effect that all contractors and subcontractors employed or that will be employed in the construction, alteration or repair under the permit are in compliance with the Kentucky law relating to worker's compensation and unemployment insurance.
- **R114.2** General Applicability. Compliance with this section shall be achieved by presenting certificates or other forms approved by Kentucky Labor Cabinet to the code official issuing the permit.

SECTION R115.0 STATE BOARD OF APPEALS

- **R115.1General.** All appeals from the decisions of local code officials shall be conducted in accordance with the appeals provisions of KRS 198B.070. Where a local appeals board exists, a party must first appeal to the local board when aggrieved by a decision of the local code official. The board shall further hear appeals directly from a party aggrieved by the decision of an agent of the department.
- **R115.2 Method of appeal.** Application for appeal by a property owner or permittee may be made when it is claimed in writing that the true intent of *this code* or the rules legally adopted thereunder have been

incorrectly interpreted, the provisions of *this code* do not fully apply, or an equally good or better form of construction can be used, or that the code official has refused to grant a modification to the provisions of *this code* covering the manner of construction or material to be used in the erection, alteration or repair of a building or structure.

R115.3 Application procedure. Appeals to the board shall be in writing and shall be addressed to the Commissioner of Housing, Buildings and Construction, 101 Sea Hero Road, Suite 100, Frankfort, Kentucky 40601-5405; Attention: Appeals Board. The appeal shall include citations of those provisions of the *Kentucky Residential Code* which are at issue, an explanation of why the decision of the local code official relative to those provisions is being contested and a copy of the decision rendered by the local appeals board, if any.

R115.4Investigation of appeal. The commissioner shall immediately notify the board or the five-member committee authorized by the board when an appeal is received. The commissioner or a designated employee of the department shall then investigate the evidence pertaining to the appeal and, based upon the results of the investigation, make written recommendations to the board or committee on the disposition of the case in question, within 30 days.

R115.5 Investigative authority. In conducting an investigation, the commissioner or the designated representatives, acting for the department, shall have the authority to administer oaths and affirmations, issue subpoenas authorized by law, rule upon offers of proof and receive relevant evidence, take or cause depositions to be taken, regulate the course of any hearings they may schedule, and hold conferences for the settlement or simplification of the issue by consent of the parties.

R115.6 Administrative hearing. Pursuant to KRS Chapter 13B, if the issue has not been settled by agreement of the parties, the Board shall schedule an administrative hearing on the matter. The cost of any appeal forwarded to the Department because there is no local appeals board shall be borne by the local government. The Department shall calculate the actual cost of processing the appeal and bill the local government at the conclusion of all proceedings.

R115.7 Judicial Appeals. Final orders of the Board are appealable to the Circuit Court in the county in which the property is located.

SECTION R116.0 EFFECTIVE DATES

R116.1General. Effective July 1, 2002, *this code* shall be mandatory and no permit shall be issued for construction under any other building code.

CHAPTER 2 DEFINITIONS

Amend Chapter 2 by creating new, deleting or adding to various sections, as follows:

Add the following definitions:

Board of Housing or **Board** means the Kentucky Board of Housing, Buildings and Construction.

Building is defined by KRS 198B.010(4).

Commissioner is defined by KRS 198B.010(9).

Department is defined by KRS 198B.010(11).

Farm means property having a bona fide agricultural or horticultural use as defined by KRS 132.010(9) and (10) which is qualified by and registered with the property valuation administrator in the county in which the property is located.

Industrialized building system or building system is defined by KRS 198B.010(18).

KBC means the Kentucky Building Code as established in 815 KAR Chapter 7:120.

KRS means the Kentucky Revised Statutes.

Manufactured home is defined by KRS 198B.010(23) and 227.550.

Masonry unit means brick, tile, stone, glass block or concrete block conforming to the requirements specified in Section 2103 of the *Kentucky Building Code*.

Modular home means an industrialized building system, which is designed to be used as a residence and which is not a manufactured or mobile home.

Ordinary repair is defined by KRS 198B.010(19).

Pools, swimming, hot tubs and spas.

Barrier. See Section P2601.2.

Hot tub. See Section P2601.2.

In-ground pool. See Section P2601.2.

Power safety cover. See Section P2601.2.

Private swimming pool, indoor. See Section P2601.2.

Private swimming pool, outdoor. See Section P2601.2.

Public swimming pool. See Section P2601.2.

Spa. See Section P2601.2.

Single-Family or **One-Family Dwelling** means a single unit providing complete independent living facilities for one (1) or more persons including permanent provisions for living, sleeping, eating, cooking and sanitation, and which shall not be connected to any other unit or building.

Townhouse means a single-family dwelling unit constructed in a group of three (3) or more attached units separated by property lines in which each unit extends from foundation to roof and with open space on at least two (2) sides.

Two-Family Dwelling means as building containing not more than two (2) family dwelling units which are connected.

CHAPTER 3 BUILDING PLANNING

Amend Chapter 3 by creating new, deleting or adding to various sections, as follows:

R301.2 Climatic and geographic design criteria. Buildings shall be constructed in accordance with the provisions of this code as limited by the provisions of this section. County-specific load criteria shall be established as set forth in Table R301.2(1). *Weathering Probability* shall be considered 'Severe'; *Termite Infestation Probability* shall be considered 'Moderate to Heavy' and *Decay Probability* shall be considered 'Slight to Moderate' for all counties in Kentucky.

TABLE R301.2(1). CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA. Replace the original Table R301.2(1) with the revised table below:

TABLE R301.2(1)
DESIGN SNOW AND SEISMIC LOADS FOR KENTUCKY COUNTIES

	Ground	Seismic		Ground	Seismic
Country	Snow Load	Design	Country	Snow Load	Design
County	$P_g (psf)^a$	Category County		P _g (psf) ^a	Category
Adair	15	В	Crittenden	15	D_1
Allen	15	В	Cumberland	15	В
Anderson	15	В	Daviess	15	C
Ballard	15	D_2	Edmonson	15	С
Barren	15	В	Elliott	15	В
Bath	15	В	Estill	15	В
Bell	15°	C	Fayette	15	В
Boone	20	В	Fleming	15	В
Bourbon	15	В	Floyd	20	В
Boyd	20	В	Franklin	15	В
Boyle	15	В	Fulton	15	\mathbf{D}_2
Bracken	20	В	Gallatin	20	В
Breathitt	15	В	Garrard	15	В
Breckinridge	15	C	Grant	20	В
Bullitt	15	В	Graves	15	\mathbf{D}_2
Butler	15	C	Grayson	15	C
Caldwell	15	\mathbf{D}_1	Green	15	В
Calloway	15	\mathbf{D}_1	Greenup	20	В
Campbell	20	В	Hancock	15	С
Carlisle	15	\mathbf{D}_2	Hardin	15	В
Carroll	20	В	Harlan	15°	C
Carter	15	В	Harrison	15	В
Casey	15	В	Hart	15	В
Christian	15	C	Henderson	15	C

TABLE R301.2(1) (Continued)
DESIGN SNOW AND SEISMIC LOADS FOR KENTUCKY COUNTIES

DESIGN SNOW AND SEISMIC LOADS FOR KENTUCKY COUNTIES									
	Ground	Seismic		Ground	Seismic				
County	Snow Load	Design	County	Snow Load	Design				
•	P _g (psf) ^a	Category	·	P _g (psf) ^a	Category				
Clark	15	В	Henry	20	В				
Clay	15	C	Hickman	15	\mathbf{D}_2				
Clinton	15	В	Hopkins	15	C				
Jackson	15	В	Morgan	15	В				
Jefferson	15	В	Muhlenberg	15	C				
Jessamine	15	В	Nelson	15	В				
Johnson	15	В	Nicholas	15	В				
Kenton	20	В	Ohio	15	C				
Knott	20	В	Oldham	15	В				
Knox	15	C	Owen	20	В				
Larue	15	В	Owsley	15	В				
Laurel	15	В	Pendleton	20	В				
Lawrence	15	В	Perry	20	С				
Lee	15	В	Pike	$20^{\rm c}$	В				
Leslie	20	C	Powell	15	В				
Letcher	20 ^d	С	Pulaski	15	В				
Lewis	20	В	Robertson	15	В				
Lincoln	15	В	Rockcastle	15	В				
Livingston	15	D_1	Rowan	15	В				
Logan	15	C	Russell	15	В				
Lyon	15	\mathbf{D}_1	Scott	15	В				
McCracken	15	D_2	Shelby	15	В				
McCreary	15	C	Simpson	15	C				
McLean	15	C	Spencer	15	В				
Madison	15	В	Taylor	15	В				
Magoffin	15	В	Todd	15	C				
Marion	15	В	Trigg	15	\mathbf{D}_1				
Marshall	15	D_1	Trimble	20	В				
Martin	20	В	Union	15	\mathbf{D}_1				
Mason	20	В	Warren	15	C				
Meade	15	В	Washington	15	В				
Menifee	15	В	Wayne	15	В				
Mercer	15	В	Webster	15	C				
Metcalfe	15	В	Whitley	15	С				
Monroe	15	В	Wolfe	15	В				
Montgomery	15	В	Woodford	15	В				

For Sl: 1 pound per square foot (psf) = 0.0479 kN/m^2 .

- a. Listed values of ground snow load, pg, shall be used in accordance to Section R301.5 of this code.
- b. Listed seismic design categories are the classifications to be used in conjunction with Section R301.2.2 of this code..
- c. Ground snow load values for elevations above 2600 feet (792.480 m) in this county shall be based on site-specific case studies *or* by other approved means of rational analysis.
- d. Ground *snow* load values for elevations above 2500 feet (762 m) in this county shall be based on site-specific case studies *or* by other approved means of rational analysis.

TABLE R301.2(2). COMPONENT AND CLADDING LOADS FOR A BUILDING WITH A MEAN ROOF HEIGHT OF 30 FEET LOCATED IN EXPOSURE B. Replace the original table with the following table:

Table R301.2(2)
COMPONENT AND CLADDING LOADS FOR A BUILDING WITH A MEAN ROOF HEIGHT OF 30 FEET LOCATED IN EXPOSURE B
AND A BASIC WIND SPEED OF 90 mph (3-second gust)

SLOPE (degrees)	ZONE	EFFECTIVE WIND AREA (feet ²)	DESIGN PRESSURE (lb/ft²)		15.15.2		SLOPE (degrees)	ZONE	EFFECTIVE WIND AREA (feet ²	PRES	SIGN SURE /ft²)
	1	10	10.0	-14.6		1	10	13.3	-14.6		
		20	10.0	-14.2			20	13.0	-13.8		
		50	10.0	-13.7			50	12.5	-12.8		
		100	10.0	-13.3			100	12.1	-12.1		
	2	10	10.0	-24.4		2	10	13.3	-17.0		
Roof		20	10.0	-21.8	Roof		20	13.0	-16.3		
0 to 10	50	10.0	-18.4	>30 to 45		50	12.5	-15.3			
		100	10.0	-15.8			100	12.1	-14.6		
	3	10	10.0	-36.8		3	10	13.3	-17.0		
		20	10.0	-30.5			20	13.0	-16.3		
		50	10.0	-22.1			50	12.5	-15.3		
		100	10.0	-15.8			100	12.1	-14.6		
	1	10	10.0	-13.3		4	10	14.6	-15.8		
		20	10.0	-13.0			20	13.9	-15.1		
		50	10.0	-12.5			50	13.0	-14.3		
		100	10.0	-12.1	Wall		100	12.4	-13.6		
_	2	10	10.0	-28.2	(vertical)	5	10	14.6	-19.5		
Roof		20	10.0	-25.6			20	13.9	-18.2		
>10 to 30		50	10.0	-22.1			50	13.0	-16.5		
		100	10.0	-19.5			100	12.4	-15.1		
	3	10	10.0	-28.2							
	20 $10.0 -25.6$ For SI: 1 foot = 304.8 mm, 1 square foot = 0										
		50	10.0	-22.1			hour = 1.609 km/s	h, 1 poun	d per		
		100	10.0	-19.5	:	square foo	t = 47.9 pascals.				

a. For effective areas between those given above the load may be interpolated, otherwise use the

- load associated with the lower effective area..
- b. Table values shall be adjusted for height and exposure by multiplying by the adjustment coefficient in Table R301.2(3).
- c. See Figure R301.2(8) for location of zones.
- d. Plus and minus signs signify pressures acting toward and away from the building surfaces.
- e. For sheathing loads and their connections where there is a finished wall or ceiling on the opposite face these pressures may be reduced by 2.2 lb/ft2 (105.4 pascals), but shall not have an absolute value less than 10 lb/ft2.

Figure R301.2(2). DESIGN SNOW AND SEISMIC LOADS FOR KENTUCKY COUNTIES. Delete the revised Figure R301.2(2) in its entirety.

FIGURE R301.2(3). WEATHERING PROBABILITY MAP FOR CONCRETE. This figure in its entirety.

FIGURE R301.2(4). BASIC WIND SPEEDS FOR 50-YEAR MEAN RECURRENCE INTERVAL. Delete this figure in its entirety.

FIGURE R301.2(5). GROUND SNOW LOADS, P_g, FOR THE UNITED STATES (lb/ft²). Delete this figure in its entirety.

FIGURE R301.2(6). TERMITE INFESTATION PROBABILITY MAP. Delete this figure in its entirety.

FIGURE R301.2(7). DECAY PROBABILITY MAP. Delete this figure in its entirety.

R301.2.1 WIND LIMITATIONS. Revise the first sentence to read: "Buildings and portions of buildings shall be limited by a basic wind speed of 90 miles per hour (144.81 km/hr) for all counties in Kentucky, and construction methods in accordance with this code."

DELETE the second sentence that begins, "Basic wind speed...."

R 301.2.1.1 Design criteria. Delete this section in its entirety.

R301.2.1.2 Internal pressure. Delete this section in its entirety.

TABLE R301.2.1.2. WINDBORNE DEBRIS PROTECTION FASTENING SCHEDULE FOR WOOD STRUCTURAL PANELS. Delete this table and footnotes in its entirety.

R301.2.1.3 Wind speed conversion. Section restored and modified as follows: "When Referenced documents are based on the *fastest mile* wind speeds, the three-second gust velocity of Section R301.2.1 shall be converted to a *fastest mile* wind velocity of 75 miles per hour (120.68 km/h).

TABLE R 301.2.1.3. EQUIVALENT BASIC WIND SPEEDS. Delete this table in its entirety.

R301.2.1.4 Exposure category. Revise the last sentence in Part 3 to read, "This category includes flat open country and grasslands."

Revise Part 4 with the following: "Exposure D. Flat, unobstructed areas exposed to wind flowing over open water for a distance of at least 1 mile (1.61 km). This exposure shall apply only to those buildings and other structures exposed to the wind coming from over the water. Exposure D extends inland from the shoreline a distance of 1,500 feet (457m) or 10 times the height of the building or structure, whichever is greater.

R301.2.2 Seismic provisions. Revise the following paragraphs to read as follows: "The seismic provisions of this code shall apply to buildings constructed in Seismic Design Categories C, D_1 , and D_2 , as determined in accordance with this section.

Exception: Detached one- and two-family dwellings (but not townhouses) located in Seismic Design Category C are exempt from the seismic requirements of this code.

The weight limitations of Section R301.2.2.4 shall apply to buildings in all Seismic Design Categories regulated by this code. Buildings in Seismic Design Category C shall be constructed in accordance with the additional requirements of Sections R301.2.2.3 and R301.2.2.5. Buildings in Seismic Design Categories D_1 and D_2 shall be constructed in accordance to the additional requirements of Section R301.2.2.6 and R301.2.2.9.

Exception: Where exceptions to the required provisions for Seismic Design Categories C, D_1 and D_2 can be shown to be justified by implementing the provisions of the *Kentucky Building Code*, a rational analysis design in accordance to the *Kentucky Building Code* may be used, subject to the approval of the Building Official.

R301.2.2.1 Determination of seismic design category. Revise the reference from "Figure 301.2(2)" to "Table 301.2(1)."

R301.2.2.1.1 Alternative determination of Seismic Design Category. Revise the reference from "Figure 301.2(2)" to "Table 301.2(1)." Add to the sentence after "Section 1615.1.1 of the Kentucky Building Code," the phrase "and a 5-percent probability of exceedance in 50 years."

TABLE R301.2.2.1.1 SEISMIC DESIGN CATEGORY DETERMINATION. Replace the table with the following table:

TABLE R301.2.2.1.1 SEISMIC DESIGN CATEGORY DETERMINATION

CALCULATED S_{DS}	SEISMIC DESIGN CATEGORY
$S_{DS} \leq 0.17g$	A
$0.17g < S_{DS} \le 0.33g$	В
$0.33g < S_{DS} \le 0.50g$	C
$0.50g < S_{DS} \le 0.83g$	D_1
$0.83g < S_{DS}$	D_2

- R301.2.2.1.2 Alternative determination of Seismic Design Category E. Delete this section in its entirety.
- **R301.2.2.2 Determination of seismic design category.** Revise the reference from "Figure 301.2(2)" to "Table 301.2(1)." Revise the third sentence in this section to read: "The value of S_{DS} determined according to this section is permitted to be used to set the Seismic Design Category according to Table R301.2.2.1.1 and to interpolate between values in Table R602.10.3 and R603.7, and other seismic design requirements of this code.
- R301.2.2.5 Masonry construction in Seismic Design Category C_{ne} . Revise all Seismic Design Category references in this section (including the title) from " C_{ne} " to "C."
- **R301.2.2.6** Height limitations in Seismic Design Categories D₁ and D₂. Restore this section as modified: "Wood framed buildings shall be limited to three stories above grade or the limits given in Table R602.10.3, unless designed and detailed by rational analysis or in accordance to Chapter 23 of the *Kentucky Building Code*. Cold-formed steel framed buildings shall be limited to two stories above grade in accordance with Sections R505.1.1, R603.1.1 and R804.1.1, unless designed and detailed by rational analysis or in accordance to Chapter 22 of the *Kentucky Building Code*. Masonry construction in Seismic Design Category D₁ shall be limited in accordance with Section R606.11.3, and masonry construction in Seismic Design Category D₂ shall be limited in accordance with Section 606.11.4, unless designed and detailed by rational analysis or in accordance to Chapter 21 of the *Kentucky Building Code*. Mezzanines as defined in Section R202 shall not be considered as stories.
- **R301.2.2.7 Irregular buildings.** Change reference from "Seismic Design Categories C and C_{ne} " to "Seismic Design Categories C, D_1 and D_2 ."
- **R301.2.2.8 Concrete construction in Seismic Design Categories D**₁ and **D**₂. Restore this section as modified section as modified from the International Residential Code. "Buildings with above-grade concrete walls in Seismic Design Categories D_1 and D_2 shall be designed in accordance to accepted engineering practice or rational design."
- **R301.2.2.9** Irregular buildings in Seismic Design Categories D_1 and D_2 . Restore this section as proposed in the International Residential Code: "In Seismic Design Categories C, D_1 and D_2 , irregular buildings shall have an engineered lateral-force-resistant system designed in accordance with accepted engineering practice or rational design. A building shall be considered to be irregular when one or more of the following conditions occur:
- 1. When exterior shear wall lines or braced wall panels are not in one plane vertically from the foundation to the uppermost story in which they are required.
 - Exception: For light-frame construction, floors with cantilevers or setbacks not exceeding four times the nominal depth of the wood floor joists or 24 inches (610 mm) for cold-formed steel joists are permitted to support braced wall panels that are out of plane with braced wall panels below provided that:

- 1. Floor joists are nominal 2 inches by 10 inches (51 mm by 254 mm) or larger and spaced not more than 16 inches (406 mm) on center;
- 2. The ratio of the back span to the cantilever is at least 2 to 1;
- 3. Floor joists at ends of braced wall panels are doubled;
- 4. For wood-frame construction, a continuous rim joist is connected to ends of all cantilever joists. When spliced, the rim joists shall be spliced using a galvanized metal tie not less than 0.058 inch (1.47 mm)(16 gage) and 1.5 inches (38mm) wide fastened with six 16d nails on each side; and
- 5. Gravity loads carried at the end of cantilevered joists are limited to uniform wall and roof load and the reactions from headers having spans of 8 feet (2438 mm) or less.
- 2. When a section of floor or roof is not laterally supported by shear walls or braced wall lines on all edges.

Exception: Portions of floors which do not support shear walls or braced wall panels above, or roofs, shall be permitted to extend no more than 6 feet (1829 mm) beyond a shear wall or braced wall line.

3. When the end of a braced wall panel occurs over an opening in the wall below and ends at a horizontal distance greater than 1 foot (305 mm) from the edge of the opening. This provision is applicable to shear walls and braced wall panels offset in plane and to braced wall panels offset out of plane as permitted by the exception to Item 1 above.

Exception: For light-frame construction, a braced wall panel shall be permitted to extend more than 1 foot (305 mm) over an opening in the wall below provided that the opening includes a header in accordance with Chapter 6 of this code. The entire length of the braced wall panel shall not occur over an opening in the wall below.

- 4. When an opening in a floor or roof exceeds the lesser of 12 feet (3657 mm) or 50 percent of the least floor or roof dimension.
- 5. When portions of a floor level are vertically offset.

Exception:

- 1. Framing supported directly by continuous foundations at the perimeter of the building.
- 2. For light-frame construction, floors shall be permitted to be vertically offset when the floor framing is lapped or tied together as required by Section R502.4.1 for wood framing and Section R505.3.1 for cold-formed steel framing.
- 6. When shear walls and braced wall lines do not occur in two perpendicular directions.
- 7. When shear walls or braced wall lines are constructed of dissimilar bracing systems on any one-story level above grade.

R301.2.3 Snow loads. Revise this section as follows: "Wood framed construction, cold-formed steel framed construction and masonry and concrete construction shall be in accordance with Chapter 5, 6 and 8.

R301.2.4 Floodplain construction. Revise this section as follows (the exception paragraph is left unchanged): "Buildings and structures constructed in flood hazard areas (including A or V Zones) as established by the local jurisdiction shall be designed and constructed in accordance with Section R327.

R303.4 Stairway Illumination. Delete this section and replace with the following: "All interior and exterior stairs shall be provided with a means to illuminate the stair, including the landings and treads. Interior stairs shall be provided with an artificial light source rated for a minimum of 850 lumens located in the immediate vicinity of each landing at the top and bottom of the stair. Exterior stairs shall be provided with an artificial light source rated for a minimum of 850 lumens located in the immediate vicinity of the top landing of the stair.

Exceptions:

- 1. An artificial light source is not required at the top and bottom landing, provided an artificial light source is located directly over each stair section.
- 2. Alternatively, for interior stairs, lighting designs providing a minimum illumination level of 10 footcandles (10.8 lx) at each tread and portions of landings within 3 feet (914 mm) of an interior step.
- 3. Alternatively, for exterior stairs, lighting designs providing a minimum illumination level of 1 footcandle (1.08 1x) at each tread and portion of walkways within 3 feet (914 mm) of a step serving a dwelling.

R305.2 Furred Ceilings. *Amend to read*: "If any room has a furred ceiling, the prescribed ceiling height is required in two-thirds of the area thereof, but the height of the furred ceiling shall not be less than 7 feet (2134 mm).

Exception: In basement recreation rooms, a furred ceiling height of 6 feet 8 inches (2032 mm) around the ducts may be made in the soffit area only for structural beams and mechanical systems. The two-thirds area requirements listed in this section shall still be met.

R309.1.1 Duct penetration. Ducts in the garage and ducts penetrating the walls or ceiling separating the dwelling from the garage shall be constructed of a minimum No. 26 gage (0.48 mm) sheet steel or other approved material.

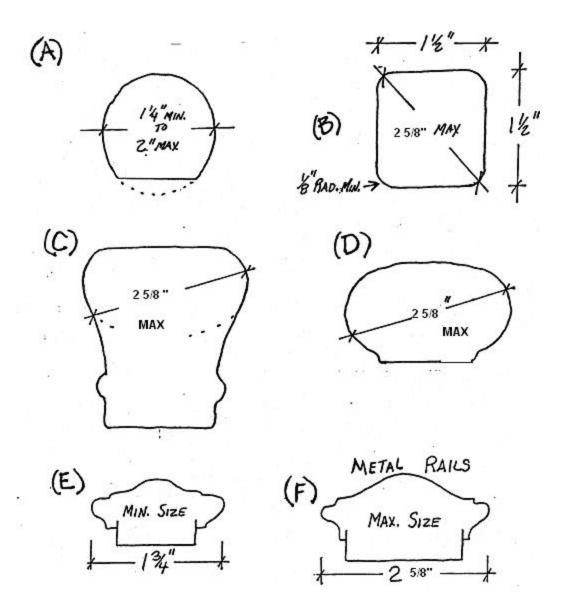
R310.1 – **Emergency Escape required.** *Delete* "Basements with habitable space and" *from the first sentence.*

R312.1.2 Landings at Doors. *Amend the first paragraph, after "landing" by adding* "or stairs"; and *amend Exception 2 by changing* "8" to 81/4.

- **R312.1.3 Landings at Required Egress Doors**. *Create a new section which reads*: "Required egress doors shall have landings."
- **R314.2 Treads & Risers** Amend the first sentence of the section to read as follows: "The maximum riser height shall be 81/4 inches and the minimum tread depth shall be 9 inches."
- **R314.6 Circular Stairways**. *Delete section in its entirety.*
- **R315.1 Handrails**. *Amend the second sentence of the section to read*: "All required handrails shall be continually graspable the full length of the stairs with 3 or more risers from a point directly above the top riser of a flight to a point directly above the lowest riser of the flight."
- **R315.2** Handrail grip size. Amend the second sentence of the section to read: "Other handrail shapes, including those complying with Figure 315.2, (A) through (F) that provide an equivalent grasping surface are permissible."

FIGURE ON FOLLOWING PAGE:

FIGURE 315.2 GRASPABLEHANDRAILS



R315.3 Stair handrails. Create a new section to read: "Stair handrails within a dwelling unit shall be permitted to be discontinuous between the top and bottom of a flight of stairs where the ends of the discontinued rail is returned to a wall or post and the maximum distance between the ends of discontinued rails in not greater than 4 inches."

R317.1.1 Alterations, Repairs and Additions. Delete existing language of Exception 1 and replace to read: "Exception 1, Smoke Alarms, in existing areas shall not be required to be interconnected or hardwired."

SECTION R322 - MOISTURE VAPOR RETARDERS

R322.1 Moisture control. Delete exception 3.

SECTION R323 – PROTECTION AGAINST DECAY

R323.1 Location required. Revise the first sentence to read from "In areas subject to decay damage as established by Figure R301.2(7), the following locations..." to "The following locations..."

SECTION R324 – PROTECTION AGAINST TERMITES

R324.1 Subterranean termite control. Revise the first sentence to read from "In areas favorable to termite damage as established by Table R301.2(1), methods of protection..." To "Methods of protection..."

SECTION R327 – FLOOD-RESISTANT CONSTRUCTION

R327.1 General. Revise the phrase in the first sentence from "...as identified in Table R301.2(1)..." to "...as established by local jurisdiction..."

R327.1.6 Protection of water supply and sanitary sewage systems. –Revise the reference from "Chapter 3 of the International Private Sewage Disposal Code" to the "Kentucky State Plumbing Code."

CHAPTER 4 FOUNDATIONS

Amend Chapter 4 by creating new, deleting or adding to various sections, as follows:

SECTION R401 – GENERAL

R401.1 Application. Revise the portion of Exception 2 that reads "...established by Table R301.2(1)..." to "...established by local jurisdiction..."

Restore the last paragraph in this section: "Wood foundations in Seismic Design Categories D_1 and D_2 shall be designed in accordance with accepted rational analysis or engineering practice.

TABLE R401.4.1 PRESUMPTIVE LOAD-BEARING VALUES OF FOUNDATION MATERIALS. Modify the table as follows:

TABLE R401.4.1 PRESUMPTIVE LOAD-BEARING VALUES OF FOUNDATION MATERIALS

FOUNDATION MATERIALS						
	LOAD-BEARING					
	PRESSURE					
CLASS OF MATERIAL	(pounds per square foot)					
Crystalline bedrock	12,000					
Sedimentary and foliated rock	4,000					
Sandy gravel and/or gravel (GW and GP)	3,000					
Sand, silty sand, clayey sand, silty gravel And clayey gravel (SW, SP, SM, SC, GM and GC)	2,000					
Clay, sandy clay, silty clay, clayey silt, silt And sandy silt (CI, ML, MH and CH)	2,000 ^b					

For SI: 1 pound per square foot = 0.0479 kN/m^2

- a. When soil tests are required by Section R401.4, the allowable bearing capacities of the soil shall be part of the recommendations.
- b. Where the building official determines that in-place soils with an allowable bearing capacity of less than 2,000 psf are likely to be present at the site, the allowable bearing capacity shall be determined by a soils investigation.

SECTION R402 – MATERIALS

TABLE R402.2 MINIMUM SPECIFIED COMPRESSIVE STRNEGTH OF CONCRETE. Replace the present table with the table below:

TABLE R402.2 MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF CONCRETE

TYPE OR LOCATIONS OF CONCRETE CONSTRUCTION	MINIMUM SPECIFIED CONCRETE STRENGTH ^a (fc)
Basement walls, foundations and other concrete not exposed to the weather	2500 ^b
Basement slabs and interior slabs on grade, except garage floor slabs	2500 ^b
Basement walls, foundation walls, exterior walls and other vertical concrete work exposed to the weather	3000°
Porches, carport slabs and steps exposed to the weather, and garage floor slabs	3500 ^{c,d}

For SI: 1 pound per square inch = 6.895 kPa

- a. At 28 days psi.
- b. Concrete in these locations that may be subject to freezing and thawing during construction shall be air-entrained concrete in accordance with footnote d.
- c. Concrete shall be air-entrained. Total air content (percent by volume of concrete) shall not be less than 5 percent or more than 7 percent.
- d. See Section R402.2 for minimum cement content.

SECTION R403 – FOOTINGS

R403.1.2 Continuous footings in Seismic Design Categories D_1 and D_2. Restore the following Section: "The braced wall panels at exterior walls of all buildings located in Seismic Design Categories D_1 and D_2 shall be supported by continuous footings. All required interior braced wall panels in buildings with plan dimensions greater than 50 feet (15 240 mm) shall also be supported by continuous footings."

R403.1.3 Seismic reinforcing. Restore the following section as modified below:

Concrete footings located in Seismic Design Categories D_1 and D_2 , as established in Table R301.2(1), shall have minimum reinforcement. Bottom reinforcement shall be located a minimum of 3 inches (76 mm) clear from the bottom of the footing.

In Seismic Design Categories D_1 and D_2 where a construction joint is created between a concrete footing and stem wall, a minimum of one No. 4 bar shall be provided at not more than 4 feet (1219 mm) on center. The vertical bar shall extend to 3 inches (76 mm) clear of the bottom of the footing, have a standard hook and extend a minimum of 14 inches (357 min) into the stem wall.

In Seismic Design Categories D_1 and D_2 where a partially-grouted masonry stem wall is supported on a concrete footing and stem wall, a minimum of one No. 4 bar shall be provided at not more than four feet on center. The vertical bar shall extend to 3 inches (76 mm) clear of the bottom of the footing and have a standard hook.

In Seismic Design Categories D_1 and D_2 masonry stem walls without grouted vertical and horizontal reinforcing shall not be permitted.

Exception: In detached one and two family dwellings which are three stories or less in height and constructed with stud bearing walls, plain concrete footings without longitudinal reinforcement supporting walls and isolated plain concrete footings supporting columns or pedestals are permitted.

R403.1.3.1 Foundations with stemwalls. Amend the section by inserting the following language at the end of the sentence to read: "In Seismic Design Categories D_1 and D_2 , as a minimum requirement, the two N. 4 bars will be placed longitudinally in the bottom of the footing."

R403.1.4 Minimum Depth. Amend the section by creating a new Table R403.1.4 and deleting the reference to table R301.2(1), inserting R403.1.4 in its place. Restore the following third paragraph: "In Seismic Design Categories D_1 and D_2 , interior footings supporting bearing or bracing walls and cast monolithically with a slab on grade shall extend to a depth or not less than 18 inches (457 mm) below the top of slab."

The table shall read as follows:

TABLE 403.1.4 MINIMUM FROST PROTECTION DEPTH FOR KENTUCKY

County	Frost Depth d _f (in)	County	Frost Depth d _f (in)	County	Frost Depth d _f (in)
Bell	27	Johnson	30	Magoffin	30
Boone	30	Kenton	30	Martin	33
Breathitt	30	Knott	33	Owsley	27
Campbell	30	Knox	27	Perry	30
Clay	27	Lawrence	27	Pike	33
Floyd	33	Leslie	30	All other KY	24
Harlan	30	Letcher	33	counties	27

For SI: 1 inch = 25.4 mm

R403.1.6 Foundation anchorage. Restore the following at the end of the first paragraph: "In Seismic Design Categories D_1 and D_2 the additional anchorage requirements of Section R602.11.1 shall apply for wood framing. In Seismic Design Categories D_1 and D_2 where continuous wood foundations in accordance with Section R404.2 are used, the force transfer shall have a capacity equal to or greater than

the connections required by R602.11.1 or the braced wall panel shall be connected to the wood foundations in accordance with the braced wall panel-to-floor fastening requirements of Table R602.3(1).

R403.1.6.1 Foundation anchorage in Seismic Design Categories D₁ and D₂. Restore the following section as modified: "In addition to the requirements of Section R403.1.6, the following requirements shall apply to light-wood frame structures in Seismic Design Categories D₁ and D₂. Anchor bolts shall be located within 12 inches (305 mm) from the ends of each plate section at interior bearing walls, interior braced wall lines and at all exterior walls. Plate washers a minimum of 2 inches by 2 inches by 3/16 inch (51 mm by 4.8 mm) thick shall be used on each bolt. The maximum anchor bolt spacing shall be 4 feet (1219 mm) for multi-story structures.

Exception: Steel mending plates rated and connected with a shear capacity of 500 pounds (2.22 kN) may be used to connect the sill splices of each plate section, provided that the maximum anchor bolt spacing is still observed.

R404.1.1 Masonry Foundation Walls. Revise the section to read as follows: "Concrete masonry and clay masonry foundation walls shall be constructed as set forth in Tables R404.1.1(1) or R404.1.1(2), Tables R404.1.1(3) and R404.1.1(4) and shall also comply with the provisions of this section and the applicable provisions of Sections R606, R607 and R608. In Seismic Design Categories D₁ and D₂ concrete masonry and clay masonry foundation walls shall comply with Section R404.1.4. Rubble stone masonry foundation walls shall be constructed in accordance with Sections R404.1.8 and R606.2.2. Rubble stone masonry walls shall not be used in Seismic Design Categories D₁ and D₂ except where backed by concrete masonry walls conforming to this code.

TABLE R404.1.1(1)
PLAIN CONCRETE AND PLAIN MASONRY FOUNDATION WALLS

		G 9						
	Soil classes ^b							
		SC inorganic	GW, GP, SW and SP	GM, GC, SM, SM-SC and ML	SC, MH, ML- CL and inorganic CL			
	_	6 6	6 solid ^d or 8 6 solid ^d or 8	6 solid ^d or 8	6 solid ^d or 8 10			
6	6 6 8 ^g	6 6 8 ^g	6 solid ^d or 8 6 solid ^d or 8	8	6 solid ^d or 8 10 12			
I	LL GW, GI (feet) AND 6 6	LL (GW, GP, SW AND SP SM, SM-and MI 6 6 6 6 6 6 6 6 6	LL (feet) GW, GP, SW AND SP SM, SM-SC and ML inorganic CL 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	CL GW, GP, SW SM, SM-SC inorganic GW, GP, SW and SP	LL (feet) GW, GP, SW AND SP SM, SM-SC and ML inorganic CL GW, GP, SW and SP SM-SC and ML 6 6 6 6 solid or 8 6 solid or 8 8 6 6 6 solid or 8 8 6 solid or 8 8			

	4	6	6	6 8 ^g	6 solid ^d or 8 6 solid ^d or 8	8 10	8
7	6	6	8	8	10	10	10 10 solid ^d
·	7	8	8	10	12	10 solid ^d	12 solid ^d
					_		
	4	6	6	6	6 solid ^d or 8	6 solid ^d or 8	8
	5	6	6	8	6 solid ^d or 8	10	12
8	6	8	8	8	10	12	12 solid ^d
	7	8	8	8	12	12 solid^{d}	Footnote e
	8	10	10	12	10 solid ^d	12 solid ^d	Footnote e
	4	6	6	6	6 solid ^d or 8	6 solid ^d or 8	8
	5	6	8 ^g	8	8	10	12
9	6	8	8	10	10	12	12 solid ^d
	7	8	10	10	12	12 solid^{d}	Footnote e
	8	10	10	10	12 solid ^d	Footnote e	Footnote e
	9	10	12	Footnote f	Footnote e	Footnote e	Footnote e

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square inch = 6,895 Pa.

- a. Mortar shall be Type M or S and masonry shall be laid in running bond. Ungrouted hollow masonry units are permitted except where otherwise indicated.
- b. Soil classes are in accordance with the Unified Soil Classification System. Refer to Table R405.1
- c. Unbalanced backfill height is the difference in height of the exterior and interior finish ground levels. Where an interior concrete slab is provided, the unbalanced backfill height shall be measured from the exterior finish ground level to the top of the interior concrete slab.
- d. Solid grouted hollow units or solid masonry units.
- e. Wall construction shall be in accordance with Table R404.1.1(2) or a design shall be provided.
- f. A design is required.
- g. Thickness may be 6 inches, provided minimum specified compressive strength of concrete, f_o is 4,000 psi.

R404.1.2 Concrete Foundation Walls. *Amend the section to read:* "Concrete foundation walls shall be constructed as set forth in Tables R404.1.1(1), R404.1.1(2), R404.1.1(3) and R404.1.1(4), and shall not comply with the provisions of this section and other applicable provisions of Section R402.2. In Seismic Design Category Cne, Table R404.1.1(1) can be used only when the height of the unbalanced fill is 4 feet of less."

R404.1.4 Seismic Design Categories D₁ and D₂. Restore the following section: "In addition to the requirements of Table R404.1.1(1), plain concrete and plain masonry foundation walls located in Seismic Design Categories D₁ and D₂, as established in Table R301.2(1), shall comply with the following:

1. Minimum reinforcement shall consist of one No. 4 (No. 13) horizontal bar located in the upper 12 inches (305 mm) of the wall,

- 2. Wall height shall not exceed 8 feet (2438 mm),
- 3. Height of unbalanced backfill shall not exceed 4 feet (1219 mm), and
- 4. A minimum thickness of 7.5 inches (191 mm) is required for plain concrete foundation walls except that a minimum thickness of 6 inches (152 mm) shall be permitted for plain concrete foundation walls with a maximum height of 4 feet, 6 inches (1372 mm).
- 5. Plain masonry foundation walls shall be a minimum of 8 inches (203 mm) thick.

Vertical reinforcement for masonry stem walls shall be tied to the horizontal reinforcement in the footings. Masonry stem walls located in Seismic Design Categories D_1 and D_2 shall have a minimum vertical reinforcement of one No. 3 bar located a maximum of 4 feet (1220 mm) on center in grouted cells.

Foundation walls located in Seismic Design D_1 and D_2 , as established in Table R301.2(1), supporting more than 4 feet (1219 mm) of unbalanced backfill or exceeding 8 feet (2438 mm) in height shall be constructed in accordance with Tables R404.1.1(2), R404.1.1(3) and R404.1.1(4) and shall have two No. 4 (No. 13) horizontal bars located in the upper 12 inches (305 mm) of the wall.

R404.1.5 Foundation wall thickness based on walls supported. *Amend thickness of foundation walls to 8 inches in both references.*

R404.1.8 Rubble Stone Masonry. Add the following to the end of this section: "...and shall not be constructed in Seismic Design Categories D_1 and D_2 except as allowed per Section R404.1.1.

R408.6 Flood resistance. Delete the phase "...as established in Table R301.2(1)..."

CHAPTER 5 FLOORS

Amend Chapter 5 by creating new, deleting or adding to various sections, as follows:

R502.3.3 Floor Cantilevers. *Create a new section to read:* Floor cantilever spans shall not exceed the nominal depth of the wood floor joist. Floor cantilevers constructed in accordance with Table R502.3.3 shall be permitted when supporting a light-frame bearing wall and roof only. The ratio of backspan to cantilever span shall be at least 3 to 1.

TABLE R502.3.3 CANTILEVER SPANS FOR FLOOR JOISTS. Replace the present table with the table below:

TABLE 502.3.3

CANTILEVER SPANS FOR FLOOR JOISTS

SUPPORTING LIGHT-FRAME EXTERIOR BEARING WALL AND ROOF ONLY^{a,b,c,f,g,h}

(Floor Live Load < 40 psf, Roof Live Load < 20 psf)

MEMBER	MAXIMUM CANTILEVER SPAN (Uplift Force at Backspan Support (pounds) ^{d, e}									
MEMBER AND SPACING	R	< 20 psf oof Width (fe		Snow Load 30 psf Roof Width (feet)						
	24	32	40	24	32	40				
2 x 8 @ 12"	20 (177)	15" (177)	-	18" (209)	-	-				
2 x 10 @ 16"	29" (228)	21" (297)	16'' (364)	26° (271)	18" (354)	-				
2 x 10 @ 12"	36" (166)	26" (219)	20" (270)	34" (198)	22" (284)	16" (324)				
2 x 12 @ 16"	-	32" (287)	25" (356)	36'' (263)	29" (345)	21" (428)				
2 x 12 @ 12"	-	42" (209)	31" (263)	-	37" (253)	27" (317)				
2 x 8 @ 8"	-	48" (136)	45" (169)	-	48" (164)	38" (206)				

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound = 4,448 Newtons, 1 pound per square foot = 0.0479 kN/m².

- a. Tabulated values are for clear-span roof supported solely by exterior bearing walls.
- b. Spans are based on No. 2 Grade lumber of douglas fir-larch, hem-fir, southern pine and spruce-pine-fir for repetitive (3 or more) members.
- c. Ratio of backspan to cantilever span shall be at least 3:1.

- d. Connections capable of resisting the indicated uplift force shall be provided at the backspan support.
- e. Uplift force is for a backspan to cantilever ration of 3:1. Tabulated uplift values are permitted to be reduced by multiplying by a factor equal to 3 divided by the actual backspan ration provided (3/backspan ratio).
- f. See Section R301.2.2.7, Note 1 for additional limitations on cantilevered floor joists in Seismic Design Categories C, D_1 and D_2 .
- g. A full-depth rim joist shall be provided at the cantilevered end of the joists.
- h. Linear interpolation shall be permitted for building widths and ground snow loads other than shown.

R502.5 Allowable girder spans. *Add a phrase to the end of the sentence*, "or in accordance with AF&PA/ NDS."

TABLE R502.5.1(1) GIRDER SPANS AND HEADER SPANS FOR EXTERIOR BEARING WALLS. Replace the present table with the following table:

TABLE R502.5(1)
GIRDER SPANS AND HEADER SPANS FOR EXTERIOR BEARING WALLS
(Maximum header spans for douglas fir-larch, hem-fir, southern pine and spruce-pine-fir^a
and required number of jack studs)

		Building width ^b (feet)						
HEADERS		2	20		28		6	
SUPPORTING	SIZE	Span	NJ ^c	Span	NJ ^c	Span	NJ^{c}	
	2-2x4	3'-6''	1	3'-2"	1	2'-10"	1	
	2-2x6	5'-5"	1	4'-8"	1	4'-2"	1	
	2-2x8	6'-10"	1	5'-11"	2	5'-4"	2	
	2-2x10	8'-5"	2	7'-3"	2	6'-6''	2	
Roof and	2-2x12	9'-9"	2	8'-5"	2	7'-6"	2	
Ceiling	3-2x8	8'-4"	1	7'-5"	1	6'-8"	1	
	3-2x10	10'-6''	1	9'-1"	2	8'-2"	2	
	3-2x12	12'-2"	2	10'-7"	2	9'-5"	2	
	4-2x8	7'-0''	1	6'-1"	2	5'-5"	2	
	4-2x10	11'-8"	1	10'-6''	1	9'-5"	2	
	4-2x12	14'-1"	1	12'-2"	2	10'-11"	2	

Roof, ceiling And one Center-Bearing floor Roof, ceiling And one Center-Bearing floor Roof, ceiling and one clear span floor	
Roof, ceiling And one Center-Bearing floor Roof, ceiling And one Center-Bearing floor Roof, ceiling and one clear span floor	
Roof, ceiling And one Center-Bearing floor Rearing floor Roof, ceiling And one Center-Bearing floor Rearing floor Rearing floor Roof, ceiling and one clear span floor Roof, ceiling and one clear span floor Roof, ceiling and one clear span floor Roof, ceiling And one Celar span floor	
And one Center-Bearing floor Parily 2	
Center-Bearing floor 3-2x8 7-2" 1 6'-3" 2 5'-8" 2 3-2x10 8'-9" 2 7'-8" 2 6'-11" 2 3-2x12 10'-2" 2 8'-11" 2 8'-0" 2 4-2x8 5'-10" 2 5'-2" 2 4'-8" 2 4-2x10 10'-1" 1 8'-19" 2 8'-0" 2 4-2x12 11'-9" 2 10'-3" 2 9'-3" 2 2-2x4 2'-8" 1 2'-4" 1 2'-1" 1 2-2x6 3'-11" 1 3'-5" 2 3'-0" 2 2-2x8 5'-0" 2 4'-4" 2 3'-10" 2 2-2x10 6'-1" 2 5'-3" 2 4'-8" 2 2-2x12 7'-1" 2 6'-1" 3 5'-5" 3	
S-2x10	
4-2x8 5'-10" 2 5'-2" 2 4'-8" 2 4-2x10 10'-1" 1 8'-19" 2 8'-0" 2 4-2x12 11'-9" 2 10'-3" 2 9'-3" 2 2-2x4 2'-8" 1 2'-4" 1 2'-1" 1 2-2x6 3'-11" 1 3'-5" 2 3'-0" 2 2-2x8 5'-0" 2 4'-4" 2 3'-10" 2 2-2x10 6'-1" 2 5'-3" 2 4'-8" 2 2-2x12 7'-1" 2 6'-1" 3 5'-5" 3	
4-2x10 10'-1" 1 8'-19" 2 8'-0" 2 4-2x12 11'-9" 2 10'-3" 2 9'-3" 2 2-2x4 2'-8" 1 2'-4" 1 2'-1" 1 2-2x6 3'-11" 1 3'-5" 2 3'-0" 2 2-2x8 5'-0" 2 4'-4" 2 3'-10" 2 2-2x10 6'-1" 2 5'-3" 2 4'-8" 2 2-2x12 7'-1" 2 6'-1" 3 5'-5" 3	
4-2x12 11'-9" 2 10'-3" 2 9'-3" 2 2-2x4 2'-8" 1 2'-4" 1 2'-1" 1 2-2x6 3'-11" 1 3'-5" 2 3'-0" 2 2-2x8 5'-0" 2 4'-4" 2 3'-10" 2 2-2x10 6'-1" 2 5'-3" 2 4'-8" 2 2-2x12 7'-1" 2 6'-1" 3 5'-5" 3	
Roof, ceiling and one clear span floor 2-2x4 2'-8" 1 2'-4" 1 2'-1" 1 2-2x6 3'-11" 1 3'-5" 2 3'-0" 2 2-2x8 5'-0" 2 4'-4" 2 3'-10" 2 2-2x10 6'-1" 2 5'-3" 2 4'-8" 2 2-2x12 7'-1" 2 6'-1" 3 5'-5" 3	
Roof, ceiling and one clear span floor 2-2x12 2'-2x8' 1 2'-4'' 1 2'-1'' 1 2-2x6 3'-11" 1 3'-5" 2 3'-0" 2 2-2x8 5'-0" 2 4'-4" 2 3'-10" 2 2-2x10 6'-1" 2 5'-3" 2 4'-8" 2 2-2x12 7'-1" 2 6'-1" 3 5'-5" 3	
Roof, ceiling and one clear span floor 2-2x8 5'-0" 2 4'-4" 2 3'-10" 2 2-2x10 6'-1" 2 5'-3" 2 4'-8" 2 2-2x12 7'-1" 2 6'-1" 3 5'-5" 3	
Roof, ceiling and one clear span floor 2-2x10 6'-1" 2 5'-3" 2 4'-8" 2 span floor 2-2x12 7'-1" 2 6'-1" 3 5'-5" 3	
and one clear span floor 2-2x10 6'-1" 2 5'-3" 2 4'-8" 2 2 span floor 2-2x12 7'-1" 2 6'-1" 3 5'-5" 3	
3-2x8 6'-3" 2 5'-5" 2 4'-10" 2	
3-2x10 7'-7" 2 6'-7" 2 5'-11" 2	
3-2x12 8'-10" 2 7'-8" 2 6'-10" 2	
4-2x8 5'-1" 2 4'-5" 2 3'-11" 2	
4-2x10 8'-9" 2 7'-7" 2 6'-10" 2	
4-2x12 10'-2" 2 8'-10" 2 7'-11" 2	
2-2x4 2'-7" 1 2'-3" 1 2'-0" 1	
2-2x6 3'-9" 2 3'-3" 2 2'-11" 2	
2-2x8 4'-9" 2 4'-2" 2 3'-9" 2	
Poof soiling 2-2x10 5'-9" 2 5'-1" 2 4'-7" 3	
Roof, ceiling and two 2-2x12 6'-8" 2 5'-10" 3 5'-3" 3	
Center bearing 3-2x8 5'-11" 2 5'-2" 2 4'-8" 2	
floors 3-2x10 7-3 2 0-4 2 3-8 2	
4-2x8 4'-10" 2 4'-3" 2 3'-10" 2	
4-2x10 8'-4" 2 7'-4" 2 6'-7" 2	
4-2x12 9'-8" 2 8'-6" 2 7'-8" 2 For St. 1 inch = 25.4 mm, 1 foot = 304.8.1 pound per square foot = 0.0470 kN/m²	

For SI: 1 inch = 25.4 mm, 1 foot = 304.8, 1 pound per square foot = 0.0479 kN/m².

- a. Tabulated values assume # 2 grade lumber.
- b. Building width is measured perpendicular to the ridge. For widths between those shown, spans are permitted to be interpolated.
- c. NJ Number of jack studs required to support each end. Where the number of required jack studs equals one, the header is permitted to be supported by an appropriate framing anchor attached to the full-height wall stud and to the header.

R502.7 Lateral restraint at supports. Restore the exception in this section:

Exception: In Seismic Design Categories D_1 and D_2 lateral restraint shall also be provided at each intermediate support.

R502.11.4 Truss design drawings. Truss design drawings prepared in compliance with Section R502.11.1, shall be provided to the building official prior to the framing inspection. The truss design drawing shall be provided with the shipment of trusses delivered to the job site. Truss design drawings shall include, at a minimum, the information specified below:

SECTION R505 – STEEL FLOOR FRAMING

R505.1.1 Applicability limits. Delete the last sentence of this section that begins, "Steel floor framing..."

TABLE R505.3.1(1) FLOOR TO FOUNDATION OR BEARING WALL CONNECTION REQUIREMENTS. Replace the present table with the table below:

TABLE R505.3.1(1) FLOOR TO FOUNDATION OR BEARING WALL CONNECTION REQUIREMENTS a,b,c

	WIND EXPOSU	IRE or SEISMIC DESI	GN CATEGORY
FRAMING CONDITION	Exposure B or Seismic Design Categories A, B, C, and D ₁	Exposure C or Design Category D ₂	Exposure D
Floor joist to wall track of exterior steel load- bearing wall per Figure R505.3.1(1)	2-No. 8 screws	3-No. 8 screws	4-No. 8 screws
Floor joist track to wood sill per Figure R505.3.1(2)	Steel plate spaced at 3' o.c. with 4-No. 8 screws and 4-10d or 6-8d common nails	Steel plate spaced at 2' o.c. with 4-No. 8 screws and 4-10d or 6-8d common nails	Steel plate spaced at 1' o.c. with 4-No. 8 screws and 4-10d or 6-8d common nails
Floor joist track to foundation per Figure R505.3.1(1)	1/2" minimum diameter anchor bolt and clip angle spaced at 6' o.c. with 8-No. 8 screws	1/2" minimum diameter anchor bolt and clip angle spaced at 4" o.c. with 8-No. 8 screws	1/2" minimum diameter anchor bolt and clip angle spaced at 2' o.c. with 8- No. 8 screws
Joist cantilever to wall track per Figure R505.3.1(4)	2-No. 8 screws per stiffener or bent plate	3-No. 8 screws per stiffener or bent plate	4-No. 8 screws per stiffener or bent plate
Joist cantilever to wood sill per Figure R505.3.1(5)	Steel plate spaced at 3' o.c. with 4-No. 8 screws and 4-10d or 6-8d common nails	Steel plate spaced at 2' o.c. with 4-No. 8 screws and 4-10d or 6-8d common nails	Steel plate spaced at 1' o.c. with 4-No. 8 screws and 4-10d or 6-8d common nails

Joist cantilever to	½" minimum diameter	½" minimum diameter	½" minimum diameter
foundation per Figure	anchor bolt and clip	anchor bolt and clip	anchor bolt and clip angle
R505.3.1(6)	angle spaced at 6' o.c.	angle spaced at 4' o.c.	spaced at 2' o.c. with 8-
	with 8-No. 8 screws	with 8-No. 8 screws	No. 8 screws

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mile per hour = 1.609 km/h.

- a. Anchor bolts shall be located not more than 12 inches from corners or the termination of Bottom tracks (e.g. at door openings). Bolts shall extend a minimum of 15 inches into masonry or 7 inches into concrete.
- b. All screw sizes shown are minimum.
- c. In Seismic Design Category D_1 and D_2 connection shall comply with requirements in Section R603.8, but shall be no less than the minimum required herein.

CHAPTER 6 WALL CONSTRUCTION

Amend Chapter 6 by creating new, deleting or adding to various sections, as follows:

TABLE R602.3(1) FASTENER SCHEDULE FOR STRUCTURAL MEMBERS. Delete note f and references in the table thereto. Revise Note g to read: "Nails for attaching wood structural panel roof sheathing to gable end wall framing shall be spaced 6 inches on center."

TABLE R602.3.1 MAXIMUM ALLOWABLE LENGTH OF WOOD WALL STUDS EXPOSED TO WIND SPEEDS OF 100 MPH OR LESS IN SEISMIC DESIGN CATEGORIES A, B, AND C. Revise titles (both pages) to read "MAXIMUM ALLOWABLE LENGTH OF WOOD WALL."

R602.10 Wall bracing. Restore the following paragraph as follows: "Walls shall be braced in accordance with this section. For buildings in Seismic Categories D_1 and D_2 , wall shall be constructed in accordance with the additional requirements of Section R602.10.9 and R602.11.

TABLE R602.10.1 WALL BRACING. Replace the table with the following table:

TABLE R602.10.1 WALL BRACING

SEISMIC DESIGN			
CATEGORY	CONDITION	TYPE OF BRACE b, c	AMOUNT OF BRACING a, d, e
Category A and B	One story Top of two or three story	Methods 1, 2, 3, 4, 5, 6, 7 or 8	Located at each end and at least every 25 feet on center but no less than 16% of braced wall line.
$(S_s < 0.35g \text{ and } S_{ds} < 0.33g)$	First story of two story Second story of three story		Located at each end and at least every 25 feet on center but no less than 16% of braced wall line for Method 3 and 25% of braced wall line for Methods 2, 4, 5, 6, 7 or 8
	First story of three story	Methods 2, 3, 4, 5, 6, 7 or 8	Minimum 48-inch wide panels located at each end and at least every 25 feet on center but not less than 35% of braced wall line for Method 3 and 35% for Methods 2, 4, 5, 6, 7 or 8

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Cotogory C	One story Top of two or three story	Methods 1, 2, 3, 4, 5, 6, 7 or 8	Located at each end and at least every 25 feet on center but no less than 16% of braced wall line for Method 3 and 25% of braced wall line for Methods 2, 4, 5, 6, 7 or 8.
Category C $(S_s < 0.6g \text{ and } S_{ds} < 0.53g$	First story of two story Second story of three story	Methods 2, 3, 4, 5, 6, 7 or 8	Located at each end and at least every 25 feet on center but no less than 30% of braced wall line for Method 3 and 45% of braced wall line for Methods 2, 4, 5, 6, 7 or 8.
	First story of three story	Methods 2, 3, 4, 5, 6, 7 or 8	Located at each end and at least every 25 feet on center but no less than 45% of braced wall line for Method 3 and 60% of braced wall line for Methods 2, 4, 5, 6, 7 or 8.
	One story Top of two or three story	Methods 2, 3, 4, 5, 6, 7 or 8	Located at each end and at least every 25 feet on center but no less than 20% of braced wall line for Method 3 and 30% of braced wall line for Methods 2, 3, 4, 5, 7 or 8.
Category D_1 ($S_s < 1.25g$ and $S_{ds} < 0.83g$	First story of two story Second story of three story	Methods 2, 3, 4, 5, 6, 7 or 8	Located at each end and at least every 25 feet on center but no less than 45% of braced wall line for Method 3 and 60% of braced wall line for Methods 2, 4, 5, 6, 7 or 8.
	First story of three story	Methods 2, 3, 4, 5, 6, 7 or 8	Located at each end and at least every 25 feet on center but no less than 60% of braced wall line for Method 3 and 85% of braced wall line for Methods 2, 4, 5, 6, 7 or 8.
	One story Top of two story	Methods 2, 3, 4, 5, 6, 7 or 8	Located at each end and at least every 25 feet on center but no less than 25% of braced wall line for Method 3 and 40% of braced wall line for Methods 2, 4, 5, 6, 7 or 8.
Category D ₂	First story of two story	Methods 2, 3, 4, 5, 6, 7 or 8	Located at each end and not more than 25 feet on center but no less than 55% of braced wall line for Method 3 and 75% of braced wall line for Methods 2, 4, 5, 6, 7 or 8.
	Cripple walls	Method 3	Located at each end and not more than 25 feet on center but no less than 75% of braced wall line.

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 0.0479 kN/m^2 .

- a. Wall bracing amounts are based on a soil site class "D." Interpolation of bracing amounts between the S_{ds} value associated with the Seismic Design Categories shall be permitted when a site specific S_{ds} value is determined in accordance with Section 1615 of the *Kentucky Building Code*.
- b. Foundation cripple wall panels shall be braced in accordance with Section R602.10.2.
- c. Methods of bracing shall be as described in Section R602.10.3. The alternate braced wall panels described in Section R602.10.6 shall also be permitted.
- d. The bracing amounts for Seismic Design Categories are based on a 15 psf wall dead load. For walls with a dead load of 8 psf or less, the bracing amounts shall be permitted to be multiplied by 0.85. The minimum length of braced panel shall not be less than required by Section R602.10.3.
- e. When the dead load of the roof/ceiling exceeds 15 psf, the bracing amounts shall be increased in accordance with Section R301.2.2.4.

R602.10.11 Bracing in Seismic Design Categories D_1 and D_2 . Restore this section in its entirety: "Bracing in Seismic Design Categories D_1 and D_2 . Structures located in Seismic Design Categories D_1 and D_2 shall be provided with exterior and interior braced wall lines. Spacing between braced wall lines in each story shall not exceed 25 feet (7620 mm) on center in both the longitudinal and transverse directions.

Exception: In one- and two-story buildings, spacing, between braced wall lines shall not exceed 35 feet (10 363 mm) on center in order to accommodate one single room not exceeding 900 square feet (83.61 m²) in each dwelling unit. The length of wall bracing in braced wall lines spaced greater or less other than 25 feet (7620 mm) apart shall be the length required by Table R602.10.1 multiplied by the appropriate adjustment factor from Table R602.10.11.

Exterior braced wall lines shall have a braced wall panel located at each end of the braced wall line.

Exception: For braced wall panel construction Method 3 of Section R602.10.3, the braced wall panel shall be permitted to begin no more than 12 feet (3810 mm) from each end of the braced wall line provided one of the following is satisfied:

- 1. A minimum 24-inch-wide (61 mm) panel is applied to each side of the building corner and the two 24-inch-wide (610 mm) panels at the corner shall be attached to framing in accordance with Figure R602.10.5 or,
- 2. The end of each braced wall panel closest to the corner shall have a tie-down device fastened to the stud at the edge of the braced wall panel closest to the corner and to the foundation or framing below. The tie-down device shall be capable of providing an uplift allowable design value of at least 1,800 pounds (816.5 kg). The tie-down device shall be installed in accordance with the manufacturer's recommendations.

A designed collector shall be provided if the bracing is not located at each end of a braced wall line as indicated above or more than 8 feet (2438 mm) from each end of a braced wall line as indicated in the exception.

TABLE R602.10.11 ADJUSTMENT OF BRACING AMOUNTS FOR INTERIOR BRACED WALL LINES ACCORDING TO BRACED WALL LINE SPACING. Restore this table in its entirety:

TABLE R602.10.11 ADJUSTMENT OF BRACING AMOUNTS FOR INTERIOR BRACED WALL LINES ACCORDING TO BRACED WALL LINE SPACING $^{\rm a,b}$

BRACED WALL LINE SPACING	MULTIPLY BRACING AMOUNT IN
(feet)	TABLE 602.10.1 BY:
15 or less	0.6
20	0.8
25	1.0
30	1.2
35	1.4

For SI: 1 foot = 304.8 mm.

- a. Linear interpolation is permissible.
- b. The adjustment is limited to the larger spacing between braced wall lines to either side of an interior braced wall line.

R602.10.11.2 Sheathing attachment. Revise the following section: "Adhesive attachment of wall sheathing shall not be permitted in Seismic Design Categories C, D_1 and D^2 .

R602.11 FRAMING AND CONNECTIONS FOR SEISMIC DESIGN CATEGORIES D_1 and D^2 . Restore the following section in its entirety: "Framing and connections for Seismic Design Categories D_1 And D^2 . The framing and connection details of buildings located in Seismic Design Categories D_1 and D^2 shall be in accordance with Sections R602.11.1 through R602.11.3.

R602.11.1 Wall anchorage. Braced wall line sills shall be anchored to concrete or masonry foundations in accordance with Sections R403.1.6 and R602.11. Plate washers, a minimum of ¼ inch by 2 inches by 2 inches (6.4 mm by 51 mm by 51 mm) in size, shall be provided between the foundation sill plate and the nut.

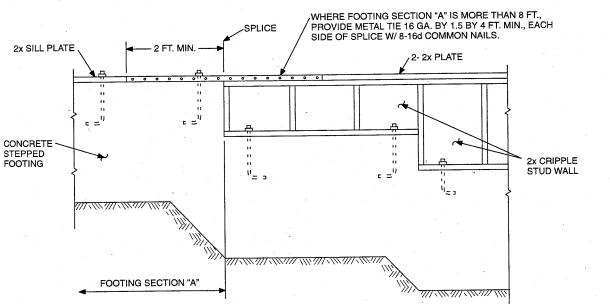
R602.11.2 Interior braced wall panel connections. Interior braced wall lines shall be fastened to floor and roof framing in accordance with Table R602.3(1), to required foundations in accordance with Section R602.11.1, and in accordance with the following requirements:

- 1. Floor joists parallel to the top plate shall be toenailed to the top plate with at least 8d nails spaced a maximum of 6 inches (150 mm) on center.
- 2. Top plate laps shall be face-nailed with at least eight 16d nails on each side of the splice.

R602.11.3 Stepped foundations. Restore the following section in its entirety: "Where stepped foundations occur, the following requirements apply:

- 1. Where the height of a required braced wall panel that extends from foundation to floor above varies more than 4 feet (1220 mm), the braced wall panel shall be constructed in accordance with Figure R602.11.3.
- 2. Where the lowest floor framing rests directly on a sill bolted to a foundation not less than 8 feet (2440 mm) in length along a line of bracing, the line shall be considered as braced. The double plate of the cripple stud wall beyond the segment of footing that extends to the lowest framed floor shall be spliced by extending the upper top plate a minimum of 4 feet (1219 mm) along the foundation. Anchor bolts shall be located a maximum of 1 foot and 3 feet (305 and 914 mm) from the step in the foundation.
- 3. Where cripple walls occur between the top of the foundation and the lowest floor framing, the bracing requirements for a story shall apply.
- 4. Where only the bottom of the foundation is stepped and the lowest floor framing rests directly on a sill bolted to the foundations, the requirements of Section R602.11.1 shall apply.

FIGURE R602.11.3 STEPPED FOUNDATION CONSTRUCTION. Restore the following figure in its entirety:



SECTION R 603 – STEEL WALL FRAMING

R603.1.1 Applicability limits. Delete the last sentence beginning "Steel walls constructed in accordance..."

R603.1.1.1 Additional limits in high wind and high seismic regions. Revise the following section as follows: "Braced wall lines and diaphragms in Seismic Design Category D₁ or greater shall be permitted to have offsets of no greater than 4 feet (1219 mm). When offsets exceed 4 feet (1219 mm) the wall to either side shall be considered as a separate braced wall line with bracing amounts in accordance with Table R603.7."

TABLE R603.3.1 WALL TO FOUNDATION OR FLOOR CONNECTION REQUIREMENTS. Revise the main heading for the right three columns to read "WIND EXPOSURE." Delete the second column that has the heading "85 A/B or Seismic…" Rename the third column heading "A/B." Rename the fourth column heading "C/D." Delete the wind velocity conversion date below the table."

TABLES R603.3..2(2) TO R603.3.2(13) COLD-FORMED STEEL STUD THICKNESS... Replace these tables with the following tables:

TABLE R603.3.2(2)
COLD-FORMED STEEL STUD THICKNESS FOR 8-FOOT WALLS
Studs supporting roof and ceiling only (one-story building or second floor of a two-story building) 33 ksi steel

	supporting						CKNESS (1		8/		
RE						Buildin	g width (fee	et) ^b			
SU) (E) (DED	1 CT CT CT	24		28	3	3	32	36		
EXPOSURE	MEMBER SIZE	MEMBER SPACING	Ground	d snow load (psf)	Ground snov	Ground snow load (psf)		Ground snow load (psf)		now load (psf)	
EX		(INCHES)	20	30 ^d	20	30 ^d	20	30 ^d	20	30^{d}	
	350S162	16	33	33	33	33	33	33	33	33	
	3303102	24	33	33	33	33	33	33	33	33	
A/B	550S162	16	33	33	33	33	33	33	33	33	
	3303102	24	33	33	33	33	33	33	33	33	
	350S162	16	33	33	33	33	33	33	33	33	
	3303102	24	33	33	33	33	33	33	33	33	
C	550S162	16	33	33	33	33	33	33	33	33	
	3303102	24	33	33	33	33	33	33	33	33	
	350S162	16	33	33	33	33	33	33	33	33	
	3305102	24	33	33	33	33	33	43	43	43	
D	550S162	16	33	33	33	33	33	33	33	33	
	3305102	24	33	33	33	33	33	33	33	33	

For SI: 1 inch=25.4 mm, 1 foot=304.8 mm, 1 mil=0.0254 mm, 1 pound per square foot=0.0479 kN/n², 1 kip per square inch=6.895 MPa.

- a. Deflection criteria: L/240
- b. Building width is the direction of horizontal framing members supported by wall studs.
- c. Design load assumptions:

Roof dead load is 12 psf.

Attic live load is 10 psf.

TABLE R603.3.2(3) COLD-FORMED STEEL STUD THICKNESS FOR 8-FOOT WALLS

Studs supporting one floor, roof and ceiling (first story of a two-story building) 33 ksi steel

田		supporting	,		STU	D THICK	VESS (mils) a, c			
EXPOSURE					I	Building wi	dth (feet) ^b				
ISC	MEMBER	MEMBER	2	24	23	8	3	32	36		
	MEMBER	MEMBER	Ground sno	w load (psf)	Ground snov	w load (psf)	Ground sno	w load (psf)	Ground sno	ow load (psf)	
EX	SIZE	SPACING (INCHES)	20	30 ^d	20	30 ^d	20	30 ^d	20	30 ^d	
	350S162	16	33	33	33	33	33	33	33	33	
	3303102	24	43	43	43	43	43	43	43	43	
A/B	550S162	16	33	33	33	33	33	33	33	33	
	3303102	24	33	33	33	33	33	33	33	33	
	3508162	350S162	16	33	33	33	33	33	33	33	33
	3303102	24	43	43	43	43	54	54	54	54	
C	550S162	16	33	33	33	33	33	33	33	33	
		24	33	33	33	33	33	33	43	43	
	350S162	16	33	33	33	33	43	43	43	43	
	3305102	24	54	54	54	54	54	54	54	54	
D	550S162	16	33	33	33	33	33	33	33	33	
	3305102	24	33	33	33	33	43	43	43	43	

For SI: 1 inch = 25.4 mm, 1 foot=304.8 mm, 1 mil=0.0254 mm, 1 pound per square foot=0.0479 kN/m², 1 kip per square inch=6.895 MPa.

- a. Deflection criteria: L/240
- b. Building width is the direction of horizontal framing members supported by wall studs.
- c. Design load assumptions:

Roof dead load is 12 psf.

Attic live load is 10 psc.

d. This column will affect only Bell, Harlan, Letcher, and Pike counties where site elevations are above those limited by notes c and d in Table R301.2(1).

TABLE R603.3.2(4) COLD-FORMED STEEL STUD THICKNESS FOR 9-FOOT WALLS

Studs supporting roof and ceiling only (one-story building or second floor of a two-story building) 33 ksi steel

田			STUD THICKNESS (mils) a, c								
URE					В	Building wi	dth (feet) ^b				
POST	MEMBER	MEMBER	24		28		32		36		
T)	MEMBER	MEMBER	Ground sno	Ground snow load (psf)		Ground snow load (psf)		Ground snow load (psf)		Ground snow load (psf)	
EX	SIZE	SPACING (INCHES)	20	30 ^d	20	30 ^d	20	30 ^d	20	30 ^d	
	350S162	16	33	33	33	33	33	33	33	33	
	3305102	24	33	33	33	33	33	33	33	33	
A/B	550S162	16	33	33	33	33	33	33	33	33	
	3305102	24	33	33	33	33	33	33	33	33	

	350S162	16	33	33	33	33	33	33	33	33
	3303102	24	33	33	33	33	33	43	43	43
C	550S162	16	33	33	33	33	33	33	33	33
	3303102	24	33	33	33	33	33	33	33	33
	350S162	16	33	33	33	33	33	33	33	33
	3303102	24	43	43	43	43	43	43	43	43
D	550S162	16	33	33	33	33	33	33	33	33
	3305102	24	33	33	33	33	33	33	33	33

For SI: 1 inch=25.4 mm, 1 foot=304.8 mm, 1 mil=0.0254 mm, 1 pound per square foot=0.0479 kN/n², 1 kip per square inch=6.895 MPa.

- a. Deflection criteria: L/240.
- b. Building width is the direction of horizontal framing members supported by wall studs.
- c. Design load assumptions:

Roof dead load is 12 psf.

Attic live load is 10 psf.

d. This column will affect only Bell, Harlan, Letcher, and Pike counties where site elevations are above those limited by notes c and d in Table R301.2(1).

TABLE R603.3.2(5) COLD-FORMED STEEL STUD THICKNESS FOR 9-FOOT WALLS

Studs supporting one floor, roof and ceiling (first story of a two-story building) 33 ksi steel

(*)					STUD		ESS (mils) a	, с				
RE			Building width (feet) ^b									
SU			Ground show load (DSL)		28	28		2	36			
EXPOSURE	MEMBER SIZE	MEMBER SPACING			Ground snov		Ground sno	w load (psf)	Ground snow load (psf)			
田		(INCHES)	20	30 ^d	20	30^{d}	20	30^{d}	20	30 ^d		
	350S162	16	33	33	33	33	33	33	33	33		
A /D	3202102	24	43	43	43	43	43	43	54	54		
A/B	550S162	16	33	33	33	33	33	33	33	33		
	3303102	24	33	33	33	33	33	33	33	33		
	350S162	16	33	33	33	33	33	43	43	43		
	3303102	24	43	54	54	54	54	54	54	54		
C	550S162	16	33	33	33	33	33	33	33	33		
	3303102	24	33	33	33	33	33	33	43	43		
	350S162	16	43	43	43	43	43	43	43	43		
	3303102	24	54	54	54	54	54	54	54	54		
D	550S162	16	33	33	33	33	33	33	33	33		
	3303102	24	33	33	43	43	43	43	43	43		

For SI: 1 inch=25.4 mm, 1 foot=304.8 mm, 1 mil=0.0254 mm, 1 pound per square foot=0.0479 kN/m², 1 kip per square inch=6.895 MPa.

- a. Deflection criteria: L/240.
- b. Building width is the direction of horizontal framing members supported by wall studs.
- c. Design load assumptions:

Roof dead load is 12 psf.

Attic live load is 10 psf.

d. This column will affect only Bell, Harlan, Letcher, and Pike counties where site elevations are above those limited by notes c and d in Table R301.2(1).

TABLE R603.3.2(6)
COLD-FORMED STEEL STUD THICKNESS FOR 10-FOOT WALLS
Studs supporting roof and ceiling only (one-story building or second floor of a two-story building) 33 ksi steel

	STUD THICKNESS (mils) ^{a, c}										
RE						Building v	vidth (feet) ^b				
SU				24	28	28		32		6	
EXPOSURE	MEMBER SIZE	MEMBER SPACING		Ground snow load (psf)		Ground snow load (psf)		Ground snow load (psf)		Ground snow load (psf)	
田		(INCHES)	20	30^{d}	20	30 ^d	20	30^{d}	20	30 ^d	
	350S162	16	33	33	33	33	33	33	33	33	
	3303102	24	33	33	33	33	33	33	33	43	
A/B	550S162	16	33	33	33	33	33	33	33	33	
	3303102	24	33	33	33	33	33	33	33	33	
	2508162	350S162	16	33	33	33	33	33	33	33	33
	3303102	24	43	43	43	43	43	43	43	43	
C	550S162	16	33	33	33	33	33	33	33	33	
	3303102	24	33	33	33	33	33	33	33	33	
	350S162	16	33	33	33	33	33	33	33	33	
	3305102	24	54	54	54	54	54	54	54	54	
D	7.70G1 < 2	16	33	33	33	33	33	33	33	33	
	550S162	24	33	33	33	33	33	33	33	33	

For SI: 1 inch=25.4 mm, 1 foot=304.8 mm, 1 mil=0.0254 mm, 1 pound per square foot=0.0479 kN/m², 1 kip per square inch=6.895 MPa.

- a. Deflection criteria: L/240.
- b. Building width is the direction of horizontal framing members supported by wall studs.
- c. Design load assumptions:

Roof dead load is 12 psf.

Attic live load is 10 psf.

d. This column will affect only Bell, Harlan, Letcher, and Pike counties where site elevations are above those limited by notes c and d in Table R301.2(1).

TABLE R603.3.2(7) COLD-FORMED STEEL STUD THICKNESS FOR 10-FOOT WALLS Studs supporting one floor, roof and ceiling (first story of a two-story building) 33 ksi steel

				STUD THICKNESS (mils) ^{a, c}								
RE						vidth (feet) ^b						
SU) (E) (DED	MEMBER		24		28 32		2	36			
XPO	MEMBER SIZE	MEMBER SPACING		snow load (psf)	Ground snow	load (psf)	Ground sno	w load (psf)	Ground sno	w load (psf)		
田		(INCHES)	20	30^{d}	20	30^{d}	20	30 ^d	20	30^{d}		

	350S162	16	33	33	33	33	43	43	43	43
	3303102	24	54	54	54	54	54	54	54	54
A/B	550S162	16	33	33	33	33	33	33	33	33
	3303102	24	33	33	33	33	33	33	43	43
	350S162	16	43	43	43	43	43	43	43	43
	3303102	24	54	54	68	68	68	68	68	68
C	550S162	16	33	33	33	33	33	33	33	33
	3303102	24	33	33	43	43	43	43	43	43
	350S162	16	43	43	43	43	43	54	54	54
	3305102	24	68	68	68	68	68	68	Note d	Note d
D	550S162	16	33	33	33	33	33	33	33	33
		24	43	43	43	43	43	43	43	43

For SI: 1 inch=25.4 mm, 1 foot=304.8 mm, 1 mil=0.0254 mm, 1 pound per square foot=0.0479 kN/m², 1 kip per square inch=6.895 MPa.

- a. Deflection criteria: L/240.
- b. Building width is the direction of horizontal framing members supported by wall studs.
- c. Design load assumptions:

Roof dead load is 12 psf.

Attic live load is 10 psf.

TABLE R603.3.2(8)
COLD-FORMED STEEL STUD THICKNESS FOR 8-FOOT WALLS
Studs supporting roof and ceiling only (one-story building or second floor of a two-story building) 50 ksi steel

			8		STU	JD THICK	NESS (mil	$(s)^{a,c}$		
RE						Building v	vidth (feet) ^b			
SU				24	28	}	3	2	3	86
EXPOSURE	MEMBER SIZE	MEMBER SPACING		l snow load (psf)	Ground snow load (psf)		Ground snow load (psf)		Ground snow load (psf)	
田		(INCHES)	20	30^{d}	20	30^{d}	20	30^{d}	20	30^{d}
	350S162	16	33	33	33	33	33	33	33	33
	3303102	24	33	33	33	33	33	33	33	33
A/B	550S162	16	33	33	33	33	33	33	33	33
		24	33	33	33	33	33	33	33	33
	350S162	16	33	33	33	33	33	33	33	33
	3305102	24	33	33	33	33	33	33	33	33
C	550S162	16	33	33	33	33	33	33	33	33
	3305102	24	33	33	33	33	33	33	33	33
	350S162	16	33	33	33	33	33	33	33	33
	3305102	24	33	33	33	33	33	33	33	33
D	550S162	16	33	33	33	33	33	33	33	33
		24	33	33	33	33	33	33	33	33

For SI: 1 inch=25.4 mm, 1 foot=304.8 mm, 1 mil=0.0254 mm, 1 pound per square foot = 0.0479 kN/m², 1 kip per square inch = 6.895 MPa.

- a. Deflection criteria: L/240.
- b. Building width is the direction of horizontal framing members supported by wall studs.
- c. Design load assumptions:

Roof dead load is 12 psf.

Attic live load is 10 psf.

d. This column will affect only Bell, Harlan, Letcher, and Pike counties where site elevations are above those limited by notes c and d in Table R301.2(1).

TABLE R603.3.2(9)
COLD-FORMED STEEL STUD THICKNESS FOR 8-FOOT WALLS
Studs supporting one floor, roof and ceiling (first story of a two-story building) 50 ksi steel

					STU	ID THICK	NESS (mil	s) ^{a, c}			
RE						Building v	vidth (feet) ^b				
SU				24	28 Ground snow load (psf)		32 Ground snow load (psf)		36 Ground snow load (psf)		
EXPOSURE	MEMBER SIZE	MEMBER SPACING		snow load (psf)							
$\widetilde{\Xi}$		(INCHES)	20	30 ^d	20	30^{d}	20	30^{d}	20	30^{d}	
	350S162	16	33	33	33	33	33	33	33	33	
	3303102	24	33	33	33	33	43	43	43	43	
A/B	550S162	16	33	33	33	33	33	33	33	33	
		24	33	33	33	33	33	33	33	33	
	350\$162	350S162	16	33	33	33	33	33	33	33	33
	3303102	24	33	43	43	43	43	43	43	43	
C	550S162	16	33	33	33	33	33	33	33	33	
	3303102	24	33	33	33	33	33	33	33	33	
	350S162	16	33	33	33	33	33	33	33	33	
	3303102	24	43	43	43	43	43	43	43	54	
D	5500160	16	33	33	33	33	33	33	33	33	
	550S162	24	33	33	33	33	33	33	33	33	

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mil = 0.0254 mm, 1 pound per square foot=0.0479 kN/m², 1 kip per square inch = 6.895 MPa.

- a. Deflection criteria: L/240.
- b. Building width is the direction of horizontal framing members supported by wall studs.
- c. Design load assumptions:

Roof dead load is 12 psf.

Attic live load is 10 psf.

TABLE R603.3.2(10) COLD-FORMED STEEL STUD THICKNESS FOR 9-FOOT WALLS

Studs supporting roof and ceiling only (one-story building or second floor of a two-story building) 50 ksi steel

	The second second		g	-5 (0-20 200	STU		NESS (mil		g)	
RE						Building v	vidth (feet) ^b			
SU) (E) (DED) (E) (DED		24	28	28		32		86
EXPOSURE	MEMBER SIZE	MEMBER SPACING		snow load (psf)	Ground snow load (psf)		Ground snow load (psf)		Ground snow load (psf)	
E		(INCHES)	20	30 ^d	20	30 ^d	20	30 ^d	20	30 ^d
	350S162	16	33	33	33	33	33	33	33	33
	3303102	24	33	33	33	33	33	33	33	33
A/B	550S162	16	33	33	33	33	33	33	33	33
		24	33	33	33	33	33	33	33	33
	350S162	16	33	33	33	33	33	33	33	33
	3305102	24	33	33	33	33	33	33	33	33
C	550S162	16	33	33	33	33	33	33	33	33
	3305102	24	33	33	33	33	33	33	33	33
	350S162	16	33	33	33	33	33	33	33	33
	3303102	24	33	33	33	33	33	33	33	33
D	550C160	16	33	33	33	33	33	33	33	33
	550S162	24	33	33	33	33	33	33	33	33

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mil = 0.0254 mm, 1 pound per square foot = 0.0479 kN/m², 1 kip per square inch = 6.895 MPa.

- a. Deflection criteria: L/240.
- b. Building width is the direction of horizontal framing members supported by wall studs.
- c. Design load assumptions:

Roof dead load is 12 psf.

Attic live load is 10 psf.

TABLE R603.3.2(11)
COLD-FORMED STEEL STUD THICKNESS FOR 9-FOOT WALLS
Studs supporting one floor, roof and ceiling (first story of a two-story building) 50 ksi steel

RE			STUD THICKNESS (mils) ^{a, c}								
			Building width (feet) ^b								
24 28							3	32	36		
	MEMBE		Ground sno	ow load (psf)	Ground snow	nd snow load (psf)		Ground snow load (psf)		Ground snow load (psf)	
EX	R SIZE	SPACING (INCHES)	20	30 ^d	20	30 ^d	20	30 ^d	20	30 ^d	
	350S16	16	33	33	33	33	33	33	33	33	
A/B	2	24	33	33	33	43	43	43	43	43	
A/D	550S16	16	33	33	33	33	33	33	33	33	
	2	24	33	33	33	33	33	33	33	33	

	350S16	16	33	33	33	33	33	33	33	33
	2	24	43	43	43	43	43	43	43	43
C	550S16	16	33	33	33	33	33	33	33	33
	2	24	33	33	33	33	33	33	33	33
	350S16	16	33	33	33	33	33	33	33	33
	2	24	43	43	43	43	43	54	54	54
D	550S16	16	33	33	33	33	33	33	33	33
	2	24	33	33	33	33	33	33	33	33

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mil = 0.0254 mm, 1 pound per square foot = 0.0479 kN/m², 1 kip per square inch = 6.895 MPa.

- a. Deflection criteria: L/240.
- b. Building width is the direction of horizontal framing members supported by wall studs.
- c. Design load assumptions:

Roof dead load is 12 psf.

Attic live load is 10 psf.

d. This column will affect only Bell, Harlan, Letcher, and Pike counties where site elevations are above those limited by notes c and d in Table R301.2(1).

TABLE R603.3.2(12)
COLD-FORMED STEEL STUD THICKNESS FOR 10-FOOT WALLS

Studs supporting roof and ceiling only (one-story building or second floor of a two-story building) 50 ksi steel

Stu	us support	ing root and	cennig on	ly (one-stor					Dunuing)	SU KSI SLEE		
Ξ							NESS (mils) ^{a, c}				
				Building width (feet) ^b								
ISC				24	28		3	2	36			
[]	MEMBE	MEMBER	Ground sno	ow load (psf)	Ground snow	load (psf)	Ground sno	w load (psf)	Ground sno	w load (psf)		
EXPOSURE	R SIZE	SPACING (INCHES)	20	30 ^d	20	30 ^d	20	30 ^d	20	30 ^d		
	350S16	16	33	33	33	33	33	33	33	33		
	2	24	33	33	33	33	33	33	33	33		
A/B	550S16	16	33	33	33	33	33	33	33	33		
	2	24	33	33	33	33	33	33	33	33		
	350S16	16	33	33	33	33	33	33	33	33		
	2	24	33	33	33	33	33	33	33	33		
C	550S16	16	33	33	33	33	33	33	33	33		
	2	24	33	33	33	33	33	33	33	33		
	350S16	16	33	33	33	33	33	33	33	33		
	2	24	43	43	43	43	43	43	43	43		
D	550S16	16	33	33	33	33	33	33	33	33		
	2	24	33	33	33	33	33	33	33	33		

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mil = 0.0254 mm, 1 pound per square foot = 0.0479 kN/m², 1 kip per square inch = 6.895 MPa.

- a. Deflection criteria: L/240.
- b. Building width is the direction of horizontal framing members supported by wall studs.
- c. Design load assumptions:

Roof dead load is 12 psf.

Attic live load is 10 psf.

d. This column will affect only Bell, Harlan, Letcher, and Pike counties where site elevations are above those limited by notes c and d in Table R301.2(1).

TABLE R603.3.2(13)
COLD-FORMED STEEL STUD THICKNESS FOR 10-FOOT WALLS
Studs supporting one floor, roof and ceiling (first story of a two-story building) 50 ksi steel

-		ads supporti	STUD THICKNESS (mils) ^{a, c}									
RE						Building v	width (feet) ^b					
SU	MEMBER	MEMBER		24	28	3	32		36			
EXPOSURE	MEMBER SIZE	MEMBER SPACING		snow load (psf)	Ground snow load (psf)		Ground snow load (psf)		Ground snow load (psf)			
闰		(INCHES)	20	30^{d}	20	30^{d}	20	30 ^d	20	30 ^d		
	350S162	16	33	33	33	33	33	33	33	33		
	3305102	24	43	43	43	43	43	43	43	54		
A/B	550S162	16	33	33	33	33	33	33	33	33		
		24	33	33	33	33	33	33	33	33		
	350S162	16	33	33	33	33	33	33	43	43		
	3305102	24	43	43	54	54	54	54	54	54		
C	550S162	16	33	33	33	33	33	33	33	33		
	3308102	24	33	33	33	33	33	33	33	33		
	350S162	16	33	33	43	43	43	43	43	43		
	3305102	24	54	54	54	54	54	54	54	68		
D	550S162	16	33	33	33	33	33	33	33	33		
		24	33	33	33	33	33	43	43	43		

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mil = 0.0254 mm, 1 pound per square foot = 0.0479 kN/m², 1 kip per square inch = 6.895 MPa.

- a. Deflection criteria: L/240.
- e. Building width is the direction of horizontal framing members supported by wall studs.
- f. Design load assumptions:

Roof dead load is 12 psf.

Attic live load is 10 psf.

g. This column will affect only Bell, Harlan, Letcher, and Pike counties where site elevations are above those limited by notes c and d in Table R301.2(1).

TABLE R603.6(5) HEADER TO KING STUD CONNECTION REQUIREMENTS. Revise table as follows:

Table R603.6(5)
HEADER TO KING STUD CONNECTION REQUIREMENTS a, b, c, d, e

	WIND EXPOSURE					
HEADER SPAN (feet)	A/B	C/D				
<u>< 4</u> '	4-No. 8 screws	6-No. 8 screws				
>4' to 8'	4-No. 8 screws	8-No. 8 screws				
>8' to 12'	4-No. 8 screws	10-No. 8 screws				
>12' to 16'	4-No. 8 screws	12-No. 8 screws				

- a. All screw sizes shown are minimum.
- b. For headers located on the first floor of a two-story building, the total number of screws may be reduced by two screws, but the total number of screws shall be no less than four.
- c. For roof slopes of 6:12 or greater, the required number of screws may be reduced by half, but the total number of screws shall be no less than four.
- d. Screws can be replaced by a up-lift connector which has a capacity of the number of screws multiplied by 164 pounds (e.g., 12-No. 8 screws can be replaced by an up-lift connector whose capacity exceeds 12 by 164 pounds = 1,968 pounds)
- e. In Seismic Design Category D₁ and D₂ connection shall comply with the requirements in Section R603.8, but shall be no less than the minimum required herein.

R603.7 Structural Sheathing. Delete the phrase at the beginning of the section "In areas where the basic wind speed is less than 110 miles per hour (177 km/hr),"

TABLE R603.7 MINIMUM PERCENTAGE OF FULL HEIGHT STRUCTURAL SHEATING ON EXTERIOR WALLS

WALL SUPPORTING	ROOF SLOPE	WIND EXPOSURE					
WALL SOLLOKTING	KOOF SLOFE	AB	С	D			
	3:12	8	12	20			
	6:12	12	20	35			
Roof and ceiling only	9:12	21	30	58			
	12:12	30	40	75			
	3:12	24	35	66			
One story, roof and ceiling	6:12	25	40	74			
	9:12	35	55	91			
	12:12	40	65	115			

- a. Linear interpolation shall be permitted.
- b. Bracing amount shall not be less than 20 percent of the wall length after all applicable adjustments are made.

- c. Minimum percentage are based on a building aspect ratio of 1:1. Minimum percentages for the shorter walls of a building shall be multiplied by a factor of 1.5 and 2.0 for building aspect ratios of 1.5:1 and 2:1 respectively.
- d. For hip roofed homes with continuous structural sheathing, the amount of bracing shall be permitted to be multiplied by a factor of 0.95 for roof slopes not exceeding 7:12 and a factor of 0.9 for roof slopes greater than 7:12.
- e. Sheathing percentage are permitted to be reduced in accordance with Section R603.7.2.

R603.8 Braced walls and diaphragms in high seismic and high wind regions. Revise this section to read as follows: "Braced walls and diaphragms in high seismic regions shall comply with this section."

R603.8.1 General. Revise the first sentence to read: "Buildings in Seismic Design Categories D_1 and D_2 shall have braced wall lines and diaphragms constructed in accordance with the additional provisions of Section R603.8.

R603.8.1.4 Attachment of braced walls to foundation and floor and roof diaphragms. Delete the last paragraph in this section that begins "In regions where the wind speed....":

TABLE R603.8.1.4(1) TOP TRACK SPLICE SCREW SCHEDULE.

TABLE R603.8.1.4(1) TOP TRACK SPLICE SCREW SCHEDULE

SDC D ₁	$SDC D_2$				
6 #8 screws each side of splice	11 # 8 screws each side of splice				

NOTE: SDC = Seismic Design Category

TABLE R603.8.1.4(2) REQUIRED SHEAR ANCHORAGE FOR BRACED WALLS. Restore this table in its entirety.

TABLE R603.8.1.4(2)
REQUIRED SHEAR ANCHORAGE FOR BRACED WALLS

	REQUIRED ANCHOR BOLT SPACING (feet on center)				
ANCHOR BOLT DIAMETER	METER Panel edge screw spacing (inches)				
(inch)	6	4	3	2	
1/2	4.5	3	3	2.5	
5/8	5.5	4	3	3	

For SI: 1 inch = 25.4 mm.

R603.8.2 SEISMIC DESIGN CATEGORIES D₁ AND D₂. Restore this section in its entirety:

R603.8.2.1 Limitations. The construction of buildings in Seismic Design Categories D_1 AND D_2 shall comply with the provisions of this section. Buildings shall be limited to slab on grade or continuous

concrete or masonry foundations and the weight of floors, roofs, or walls shall not exceed the limits set forth in Section 301.2.2.4.

Exception: Buildings constructed in accordance with Section 301.1.

R603.8.2.2 Required length of Type I braced wall panels. For the purposes of this section, the diaphragm aspect ratio shall be taken as the dimension of the diaphragm perpendicular to the walls under consideration divided by the dimension of the diaphragm parallel to the walls under consideration, and shall be not less than one-quarter to one (0.25:1) nor more than four to one (4:1). The required length of Type I braced wall panels shall be determined from Figures R603.8.2(1) through R603.8.2(4) where the diaphragm span is the dimension of the diaphragm perpendicular to the walls under consideration.

Interpolation shall be permitted for determining diaphragm span values.

The required length of Type I braced wall panels is permitted to be adjusted by length adjustment factors in Table 603.8.2.2 where the dead weights of roof/ceiling assemblies and exterior walls are less than or equal to the unit weights specified therein. The required length of Type I braced wall panels shall be increased by length adjustment factors in Table R603.8.2.2 where the dead weights of roof/ceiling, assemblies are greater than 15 psf (0.7185 kN/m²) and less than or equal to 25 psf (1.1975 KN/m²). The length adjustment factors in Tables R301.2.2.4 and R603.8.2.2 are permitted to be compounded with those in Table R603.8.1.2.

The height to width aspect ratio in Type I braced wall panels and full height sheathing segments in Type II braced walls shall be limited to two to one (2:1).

Exception: Type I braced wall panels on either side of garage openings, that support roofs only, are permitted to have an aspect ratio of four to one (4:1).

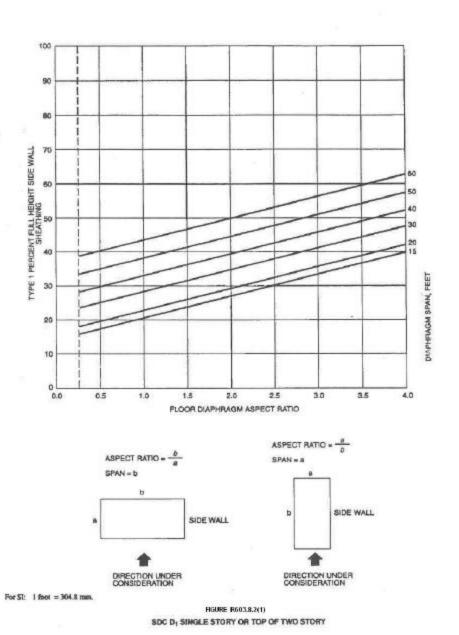
TABLE R603.8.2.2 LIGHT WEIGHT ROOF AND LIGHT WEIGHT EXTERIOR WALL TYPE I LENGTH ADJUSTMENT FACTORS. Restore this table in its entirety:

TABLE R603.8.2.2 LIGHT WEIGHT ROOF AND LIGHT WEIGHT EXTERIOR WALL TYPE I LENGTH ADJUSTMENT FACTORS

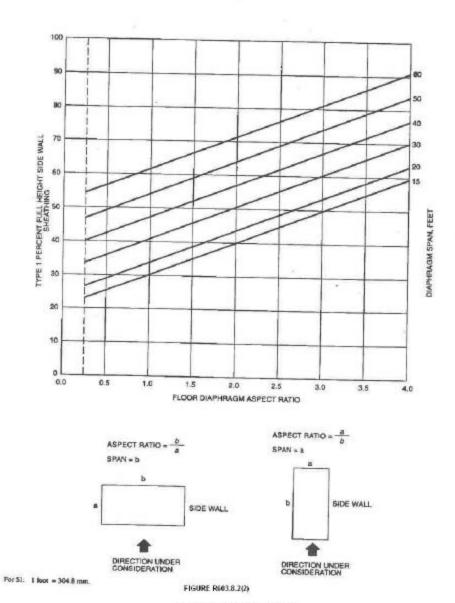
	LIGHT WEIGHT	LIGHT WEIGHT	BUILDINGS		
	ROOF/CEILING	EXTERIOR	HAVING BOTH		
BRACED WALL	-UNIT	WALLS-UNIT	LIGHT WEIGHT WALLS AND		
SUPPORTING	WEIGHT LESS	WEIGHT LESS			
	THAN 11 PSF	THAN 7 PSF	ROOFS		
Roof/ceiling Only	0.80	0.95	0.70		
One floor and Roof/ceiling	0.90	0.90	0.75		

For SI: 1 pound per square foot = 0.0479 kN/m^2 .

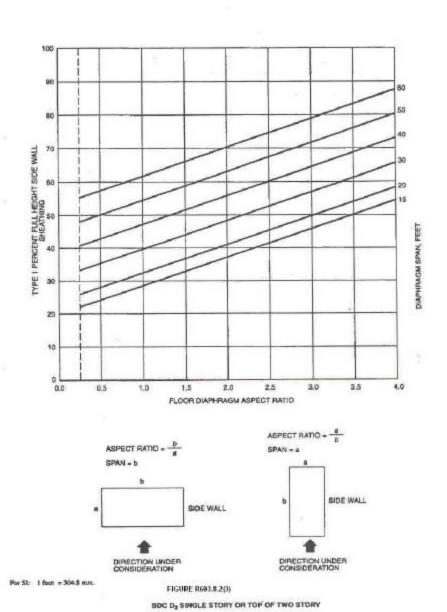
FIGURES R603.8.2(1) THROUGH R603.8.2(4). Restore the figures on the following pages in their entirety:

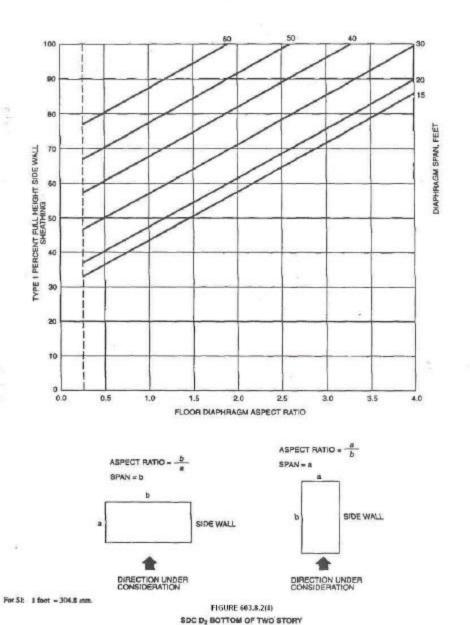


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SDC D1 BOTTOM OF TWO STORY





R603.8.3 High wind requirements. Delete this section and all of its subsections in their entirety.

TABLES R603.8.3.1(1) through R603.8.3.1(4), TABLES R603.8.3.2.1(1), TABLES R603.8.3.2.1(2), TABLE R603.8.3.2.2(1), TABLE R603.8.3.2.2(2), TABLES R603.8.3.2.3(1), and TABLE R603.8.3.2.3(2). Delete these tables in their entirety.

FIGURE R603.8.3.2.3 WIND UPLIFT CONNECTOR. Delete this figure in its entirety.

FIGURE R606.10(2), Delete the existing title and replace with the following: "Requirements for Reinforced Grouted Masonry Construction in Seismic Design Category C."

FIGURE R606.10(3), *Amend the title to read as follows:* "REQUIREMENTS FOR REINFORCED MASONRY CONSTRUCTION IN SEISMIC DESIGN CATEGORIES D₁ AND D₂.

R606.11 Seismic requirements. Revise the phrase "...in Seismic Design Categories C and C_{ne} to "...in Seismic Design Categories C, D_1 and D_2 .

R606.11.1.1 Floor and roof diaphragm construction. Revise the phrase "For Seismic Design Category C_{ne} " to For Seismic Design Categories C, D_1 and D_2 .

R606.11.2 Seismic Design Categories C and C_{ne}. Revise the title to read "Seismic Design Category C." Revise the phrase "...in Seismic Design Category C and C_{ne} shall..." to "...in Seismic Design Category C shall..."

R606.11.3 Seismic Design Category D₁. Restore this section in its entirety:

R606.11.3 Seismic Design Category D_1 . Structures in Seismic Design Category D_1 shall comply with the requirements of Seismic Design Category C and the additional requirements of this section. Masonry structures in Seismic Design Category D_1 shall be limited in height to one story and 9 feet (2743 mm) between lateral supports.

R606.11.2.1 Design requirements. Masonry elements other than those covered by Section R606.11.2.1.2 shall be designed in accordance with the requirements of Chapter 7 of ACI 530/ASCE 5/TMS 402.

R606.11.3.2 Minimum reinforcement requirements for masonry walls. Masonry walls other than those covered by Section R606.11.2.1.3 shall be reinforced in both the vertical and the horizontal direction. The sum of the cross-sectional area of horizontal and vertical reinforcement shall be at least 0.002 times the gross cross-sectional area of the wall, and the minimum cross-sectional area in each direction shall be not less than 0.0007 times the gross cross-sectional area of the wall. Reinforcement shall be uniformly distributed. Table R606.11.3.2 provides the minimum reinforcing bar sizes required for varying thicknesses of masonry walls. The maximum spacing of reinforcement shall be 48 inches (1219 mm) provided that the walls are solidly grouted around all reinforced cavities and constructed of

hollow open-end units, hollow units laid in full head joints or two wythe of solid units. The maximum spacing of reinforcement shall be 24 inches (610 mm) for all other masonry.

R606.11.2.2.1 Shear wall reinforcement requirements. The maximum spacing of vertical and horizontal reinforcement shall be the smaller of one-third the length of the shear wall, one third the height of the shear wall (except crawl space foundation walls), or 48 inches (1219 mm). The minimum cross-sectional area of vertical reinforcement shall be one-third of the required shear reinforcement. Shear reinforcement shall be anchored around terminal vertical reinforcing bars with a standard book.

R606.11.3.3 Minimum reinforcement for masonry columns. Lateral ties in masonry columns shall be spaced not more than 8 inches (203 mm) on center and shall be at least 3/8 inch (9.5 mm) diameter. Lateral ties shall be embedded in grout.

R606.11.3.4 Material restrictions. Type N mortar or masonry cement shall not be used as part of the lateral-force-resisting system.

R606.11.3.5 Lateral tie anchorage. Standard hooks for lateral ties anchorage shall be either a 135 – degree (2.4 rad) standard hook or a 180-degree (3.2 rad) standard hook.

TABLE R606.11.3.2 MINIMUM DISTRIBUTED WALL REINFORCEMENT FOR BUILDINGS ASSIGNED TO SEISMIC DESIGN CATEGORY D₁. Restore this table in its entirety:

TABLE R606.11.3.2 MINIMUM DISTRIBUTED WALL REINFORCEMENT FOR BUILDINGS ASSIGNED TO SEISMIC DESIGN CATEGORY \mathbf{D}_1

NOMINAL WALL THICKNESS (inches o.c.)	MINIMUM SUM OF THE VERTICAL AND HORIZONTAL REINFORCEMENT AREAS ^a	MINIMUM REINFORCEMENT AS DISTRIBUTED IN BOTH HORIZONTAL AND VERTICAL DIRECTIONS ^b (square inches per foot)	MINIMUM BAR SIZE FOR REINFORCEMENT SPACED AT 48 INCHES
6	0.135	0.047	#4
8	0.183	0.064	#5
10	0.231	0.081	#6
12	0.279	0.098	#6

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 square inch per foot = 2.12 mm²/mm.

- a. Based on the minimum reinforcing ratio of 0.002 times the gross cross-sectional area of the wall.
- b. Based on the minimum reinforcing ratio each direction of 0.0007 times the gross cross-sectional area of the wall.

R606.11.4 Seismic Design Category D₂. Restore these sections in their entirety:

R606.11.4 Seismic Design Category D_2 . Structures in Seismic Design Category D_2 shall comply with the requirements of Seismic Design Category D_1 and to the additional requirements of this section.

R606.11.4.1 Design of elements not part of the lateral-force-resisting system. Stack bond masonry that is not part of the lateral-force-resisting system shall have a horizontal cross-sectional area of reinforcement of at least 0.0015 times the gross cross-sectional area of masonry. Table R606.11.4.1 provides minimum reinforcing bar sizes for masonry walls. The maximum spacing of horizontal reinforcement shall be 24 inches (610 mm). These elements shall be solidly grouted around all reinforced cavities and shall be constructed of hollow open-end units or two wythes of solid units.

R606.11.4.2 Design of elements part of the lateral-force-resisting system. Stack bond masonry that is part of the lateral-force-resisting system shall have a horizontal cross-sectional area of reinforcing at least 0.0025 times the gross cross-sectional area of masonry. Table R606.11.4.2 provides minimum reinforcing bar sizes for masonry walls. The maximum spacing of horizontal reinforcement shall be 16 inches (406 mm). These elements shall be solidly grouted around all reinforced cavities and shall be constructed of hollow open-end units or two wythes of solid units.

TABLE R606.11.4.1 MINIMUM REINFORCING FOR STACKED BONDED MASONRY WALLS IN SEISMIC DESIGN CATEGORY D₂. Restore this table in its entirety:

TABLE R606.11.4.1
MINIMUM REINFORCING FOR STACKED BONDED MASONRY
WALLS IN SEISMIC DESIGN CATEGORY D₂

NOMINAL WALL THICKNESS (inches)	MINIMUM BAR SIZE SPACED AT 24 INCHES
6	#4
8	#5
10	#5
12	#6

For SI: 1 inch = 25.4 mm

TABLE R606.11.4.2 MINIMUM REINFORCING FOR STACKED BONDED MASONRY WALLS IN SEISMIC DESIGN CATEGORY \mathbf{D}_2 . Restore this table in its entirety:

TABLE R606.11.4.2
MINIMUM REINFORCING FOR STACKED BONDED MASONRY
WALLS IN SEISMIC DESIGN CATEGORY D₂

NOMINAL WALL THICKNESS (inches)	MINIMUM BAR SIZE SPACED AT 24 INCHES				
6	#4				
8	#5				
10	#5				
12	#6				

For SI: 1 inch = 25.4 mm

SECTION R607 – UNIT MASONRY

R607.1.3 Masonry in Seismic Design Categories D_1 and D_2 . Restore this section in its entirety: "Mortar for masonry serving as the lateral-force-resisting system in Seismic Design Categories D_1 and D_2 shall be Type M or S Portland cement-lime or mortar cement mortar.

SECTION R611 - INSULATING CONCRETE FORM WALL CONSTRUCTION.

TABLE R611.3 MINIMUM VERTICAL WALL REINFORCEMENT FOR FLAT ICF ABOVE-GRADE WALLS. Delete the first column of the table with the heading "MAXIMUM WIND SPEED (mph)." Delete all rows of data for wind speeds of 100 mph through 130 mph. Delete unit conversion for miles per hour.

TABLE R611.4(1) MINIMUM VERTICAL WALL REINFORCEMENT FOR WAFFLE-GRID ICF ABOVE-GRADE WALLS. Delete the first column of the table with the heading "MAXIMUM WIND SPEED (mph)." Delete all rows of data for wind speeds of 100 mph through 130 mph. Delete unit conversion for miles per hour.

TABLE R611.5 MINIMUM VERTICAL WALL REINFORCEMENT FOR SCREEN-GRID ICF ABOVE-GRADE WALLS. Delete the first column of the table with the heading "MAXIMUM WIND SPEED (mph)." Delete all rows of data for wind speeds of 100 mph through 130 mph. Delete unit conversion for miles per hour.

TABLE R611.7(2) THROUGH R611.7(6) MAXIMUM ALLOWABLE CLEAR SPANS FOR ICF LINTELS FOR FLAT AND SCREEN-GRID LOAD-BEARING WALLS. Delete the column heading labeled "maximum ground snow load (psf)," and the row of numbers (30 and 70) below it. Delete all columns (4th, 6th and 8th) that applied to 70 psf ground snow loads. Delete unit conversions for pounds per square foot.

TABLE R611.7(2) through R611.7(6). MAXIMUM PERCENTAGE OF SOLID WALL LENGTH ALONG EXTERIOR WALL LINES. Delete the column heading labeled "Maximum wind speed (mph)," and the row of numbers (85 to 130) below it. Delete all columns under the wind speed heading except for those applicable to an 85 mph wind speed (3rd and 8th). Delete unit conversions for miles per hour.

R611.7.1.4 Dwellings in Seismic Category C and C_{ne}. Revise title and text in this section to read "Seismic Category C." Delete instances of "…and C_{ne} ."

SECTION R613 – EXTERIOR WINDOWS AND GLASS DOORS. Delete this section in its entirety.

CHAPTER 7 WALL COVERING

Amend Chapter 7 by creating new, deleting or adding to various sections, as follows:

SECTION R703 – EXTERIOR COVERING

R703.7 Stone and masonry veneer, general. Add the following exceptions at the end of this section:

- 3. For detached one- and two-family dwellings with exterior masonry veneer and a backing of wood or metal framing located in Seismic Design Category D₁, where the veneer has a maximum nominal thickness of 4 inches (102 mm) or a maximum weight of 37 pounds per square foot (180.6 kg/m²) the masonry veneer shall not exceed 20 feet (6096 mm) in height above a noncombustible foundation, with an additional 8 feet (2438 mm) permitted for gabled ends, or 30 feet (9144 mm) in height with an additional 8 feet (2438 mm) permitted for gabled ends where the lower 10 feet (3049 mm) has a backing of concrete or masonry wall, provided the following criteria are met:
 - a. Braced wall panels shall be constructed with a minimum 7/16 inch (11.1 mm) thick sheathing fastened with 8d common nails (No. 8 screws in metal studs) at 4 inches (102 mm) on center on panel edges and at 12 inches (305 mm) on center for intermediate supports.
 - b. The bracing of the top story shall be located at each end and at least every 25 feet (7620 mm) on center but not less than 45% of the braced wall line. The bracing of the first story shall be as provided in Table R602.10.1 or Section R603.8.2.
 - c. Hold down connectors shall be provided at the ends of braced walls for the second floor to the first floor wall assembly with an allowable design of 2100 lbs (952.5 kg). Hold down connectors shall be provided at the ends of each wall segment of the braced walls for the first floor to foundation assembly with an allowable design of 3700 lbs (1678 kg). In all cases the hold down connector force shall be transferred to the foundation.
- 4. For detached one- and two-family dwellings where the masonry veneer has a maximum actual thickness of 3 inches (76 mm) or a maximum weight of 37 pounds per square foot (180.6 kg/m²) and provided with a backing of a wood or metal stud frame located in Seismic Category D₂, the masonry veneer shall not exceed 20 feet (6096 mm) in height above a noncombustible foundation, with an additional 8 feet (2438 mm) permitted for gabled ends, or 30 feet (9144 mm) in height with an additional 8 feet (2438 mm) permitted for gabled ends where the lower 10 feet (3049 mm) has a backing of concrete or masonry wall, provided the following criteria area met:
 - a. Braced wall panels shall be constructed with a minimum 7/16 inch (11.1 mm) thick sheathing fastened with 8d common nails (No. 8 screws in metal studs) at 4

- inches (102 mm) on center on panel edges and at 12 inches (305 mm) on center for intermediate supports.
- b. The bracing of the top story shall be located at each end and at least every 25 feet (7620 mm) on center but not less than 55% of the braced wall line. The bracing of the first story shall be as provided in Table R602.10.1 or Section R603.8.2.
- c. Hold down connectors shall be provided at the ends of braced walls for the second floor to the first floor wall assembly with an allowable design of 2300 lbs (1043 kg). Hold down connectors shall be provided at the ends of each wall segment of the braced walls for the first floor to foundation assembly with an allowable design of 3900 lbs (1769 kg). In all cases the hold down connector force shall be transferred to the foundation.
- d. Cripple walls shall not be permitted.

R703.7.2 Exterior veneer support. Restore the modified phrase at the beginning of the section, "Subject to the limitations imposed on Seismic Design Categories D_1 and D_2 ."

R703.7.2.1 Support by steel angle. Restore the section to its original wording: "A minimum 6 inches by 4 inches by 5/16 inch (152 mm by 102 mm by 8 mm) steel angle, with the long leg placed vertically, shall be anchored to double 2 inches by 4 inches (51 mm by 102 mm) wood studs at a maximum on center spacing of 16 inches (406 mm). Anchorage of the steel angle at every double stud spacing shall be a minimum of two 7/16 inch (11.1 mm) diameter by 4 inches (102 mm) lag screws. The steel angle shall have a minimum clearance to underlying construction of 1/16 inch (1.6 mm). A minimum of two-thirds the width of the masonry veneer thickness shall bear on the steel angle. Flashing and weep holes shall be located in the masonry veneer wythe in accordance to Figure R703.7.1. The maximum height of masonry veneer above the steel angle support shall be 12 feet, 8 inches (3861 mm). The maximum slope of the roof construction shall be not more than 7:12. The air space separating the masonry veneer from the wood backing shall be in accordance with Sections R703.7.4 and R703.7.4.2.

R703.7.4 Anchorage. Masonry veneer shall be anchored to the supporting wall with corrosion-resistant metal ties. Where veneer is anchored to wood backings through the use of corrugated sheet metal ties, the distance separating the veneer from the sheathing material shall be a maximum of 1 inch (25.4 mm). Where the veneer is anchored to wood backings through the use of metal strand wire ties, the distance separating the veneer from the sheathing material shall be a maximum of 4.5 inches (114 mm). Where the veneer is anchored to cold-formed steel backings, adjustable metal strand wire ties shall be used. Where veneer is anchored to cold-formed steel backings, the distance separating the veneer from the sheathing material shall be a maximum of 4.5 inches (114 mm).

R703.7.4.1 Size and spacing. Revise the exception to read as follows: "Exception: In Seismic Design Category D_1 and D_2 , and for wind Exposure D, each tie shall support not more than 2 square feet (0.186 m^2) of wall area.

R703.7.4.1.2 Seismic Design Categories D_1 and D_2 . Restore this section as proposed in the International Residential Code: "In Seismic Design Categories D_1 and D_2 , veneer ties shall be

mechanically attached to horizontal joint reinforcement wire a minimum of No. 9 gage. The horizontal joint reinforcement shall be continuous in the veneer bed joint, with lap splices permitted between the veneer tie spacing.

R703.7.4.2 Air space. The veneer shall be separated from the sheathing by an air space of a minimum of 0.75 inch (19 mm) but not more than 4.5 inches (114 mm). The weather-resistant membrane or asphalt-saturated felt required by Section R703.2 is not required over water-repellent sheathing materials.

R703.7.4.3 Mortar or grout fill. As an alternate to the air space required by R703.7.4.2, mortar or grout shall be permitted to fill the air space. When the 0.75 inch (19 mm) air space is filled with mortar, a weather-resistant membrane or building paper is required over studs or sheathing. When filling the air space, it is permitted to replace the sheathing and weather-resistant membrane or asphalt-saturated felt paper with a wire mesh and approved paper or an approved paper-backed reinforcement attached directly to the studs.

TABLE R703.4. Modify footnote "m" as follows: "m. For masonry veneer, a weather-resistant membrane or building paper is not required over water-repellant sheathing materials when a 0.75 inch air space is provided between the veneer and the sheathing. When the 0.75 inch space is filled with mortar, a weather-resistant membrane or building paper is required over study or sheathing."

FIGURE R703.7 MASONRY VENEER WALL DETAILS. Change drawing note "1 IN.-AIR SPACE OR 1 IN.-MORTARED SPACE^{C"} to "0.75 IN.-AIR SPACE OR 0.75 IN.-MORTARED SPACE^C."

CHAPTER 8 ROOF-CEILING CONSTRUCTION

SECTION R802 – WOOD ROOF FRAMING

R802.5 Allowable rafter spans. Revise the first sentence as follows: "Spans for rafters shall be in accordance with Tables R802.5.1(1), R802.5.1(2), R802.5.1(3) and R802.5.1(5)."

TABLE R802.5.1(1) and TABLE R802.5.1(2) RAFTER SPANS FOR COMMON LUMBER SPECIES. Revise the third line of the title from "(Roof live load = 20 psf..." to "Roof live or ground snow load = 20 psf..."

TABLE R802.5.1(3) and **TABLE R802.5.1(5) RAFTER SPANS FOR COMMON LUMBER SPECIES.** Add a footnote reference c after "Ground snow load = 30 psf" on the third line of the title. Add footnote "c" as follows: "c. This table will affect only Bell, Harlan, Letcher and Pike counties where site elevations are above those limited by notes c and d in Table R301.2(1)."

TABLE R802.5.1(4) and TABLE R802.5.1(6) through TABLE R802.5.1(8) RAFTER SPANS FOR COMMON LUMBER SPECIES. Delete these tables in their entirety.

TABLE R802.5.1(9) RAFTER/CEILING JOIST HEEL JOINT CONNECTIONS. Delete the last 8 columns under the subheadings "50 psf" and "70 psf." Delete the general column heading 'GROUND SNOW LOAD (psf)" and the load values (30 psf, etc.) in the row below that. Delete conversion data for pounds per square foot.

FIGURE R802.5.1 BRACED RAFTER CONSTRUCITON. Revise the note at the top of the figure that begins "RAFTER SPAN-..." WITH THE NOTATION "RAFTER SPAN – SEE TABLES R802.5.1(1), R802.5.1(2), R802.5.1(3) AND R802.5.1(5).

TABLE R802.11 REQUIRED STRENGTH OF TRUSS RAFTER TIE-DOWN CONNECTIONS TO RESIST WIND UPLIFT FORCES. Revise the beginning of note d to read "Table R301.2(1) and Table R301.2(2)..."

SECTION R 803 – ROOF SHEATHING

R803.1 LUMBER SHEATHING. Restore the last sentence: "Spaced lumber sheathing is not allowed in Seismic Design Category D_2 ."

SECTION R804 – STEEL ROOF FRAMING

R804.1.1 Applicability limits. Delete the last sentence that begins "Steel roof framing..."

TABLE R804.3.1(3) NUMBER OF SCREWS REQUIRED FOR CEILING JOIST TO RAFTER CONNECTION. Add a reference to note b at each occurrence of the headings "Ground snow load." Add a note b to read as follows: "b. Use the larger of the ground snow load or the equivalent ground snow load determined in Table R804.3.3(2).

TABLE R804.3.3(2) BASIC WIND SPEED TO EQUIVALENT SNOW LOAD CONVERSION. Replace the table with the following:

TABLE R804.3.3(2)
BASIC WIND SPEED TO EQUIVALENT SNOW LOAD CONVERSION

	EQUIVALENT GROUND SNOW LOAD (PSF)									
EXPOSURE	Roof slope									
	3:12	4:12	5:12	6:12	7::12	8:12	9:12	10:12	11:12	12:12
A/B	20	20	20	20	20	20	30	30	30	30
C	20	20	20	20	30	30	30	30	50	50
D	30	30	30	50	50	50	70	70	70	N/A

For SI: 1 pound per square foot -0.0479 kN/m².

N/A = Not allowed.

TABLE R804.3.3.1 NUMBER OF SCREWS REQUIRED AT EACH LEG OR CLIPANGLE FOR RAFTER TO RIDGE MEMBER CONNECTION. Add a reference to note b at the end of the heading "GROUND SNOW LOAD (psf)." Add a note b to read as follows: "b. Use the larger of the ground snow load or the equivalent ground snow load determined in Table R804.3.3(2)."

R804.3.3.1.1 High wind ridge tension connections. Delete this section in its entirety.

TABLE R804.3.3.1.1(1) RIDGE TENSION STRAP CONNECTION REQUIREMENTS PER FOOT OF RIDGE SPAN. Delete this table in its entirety.

TABLE R804.3.3.1.1(2) MINIMUM SIZE OF RIDGE STRAP. Delete this table in its entirety.

CHAPTER 9 ROOF ASSEMBLIES

Amend Chapter 9 by creating new, deleting or adding to various sections, as follows:

SECTION R905 – REQUIREMENTS FOR ROOF COVERINGS

- **R905.2.6** Attachment. Delete the exception and all three categories.
- **R905.2.7.1 Ice protection.** Delete the phrase at the beginning of this section, "In areas where the average daily temperature in January is 25° F (-4° C) or less..."
- **R905.2.7.2** Underlayment and high wind. Delete this section in its entirety.
- **R905.3.3.3 Underlayment in high wind.** Delete this section in its entirety.
- **R905.3.7 Application.** Revise the sentence in the second paragraph (beginning on line 7); "...Clay and concrete roof tile attachment shall be in accordance with the manufacturer's installation instructions where applied on buildings where the roof is located more than 40 feet (12 192 mm) above grade..."
- **R905.3.8 Flashing.** Delete the phrase in the last sentence of this section, "In areas where the average daily temperature in January is 25° F (-4° C) or less..."
- **R905.4.3** Underlayment. Delete the phrase at the beginning of this section, "In areas where the average daily temperature in January is 25° F (-4° C) or less..."
- **R905.4.6 Flashing.** Delete the phrase in the last sentence of this section, "In areas where the average daily temperature in January is 25° F (-4° C) or less..."
- **R905.5.3** Underlayment. Delete the phrase at the beginning of this section, "In areas where the average daily temperature in January is 25° F (-4° C) or less..."
- **R905.6.3** Underlayment. Delete the phrase at the beginning of this section, "In areas where the average daily temperature in January is 25° F (-4° C) or less..."
- **R905.7.1.1 Solid sheathing required.** Delete the phrase at the beginning of this section, "In areas where the average daily temperature in January is 25° F (-4° C) or less..."
- **R905.7.3** Underlayment. Delete the phrase at the beginning of this section, "In areas where the average daily temperature in January 25° F (-4° C) or less..."
- **R905.8.1.1 Solid sheathing required.** Delete the phrase at the beginning of this section, "in areas where the average daily temperature in January is 25° F (-4° C) or less…"
- **R905.8.3** Underlayment. Delete the phrase at the beginning of this section, "In areas where the average daily temperature in January is 25° F (-4° C) or less..."

SECTION R907 – REROOFING

R907.3 Recovering versus replacement. Delete condition 4 that begins "For asphalt shingles..." in its entirety.

FIGURE R907.3 HAIL RISK MAP. Delete this figure in its entirety.

CHAPTER 10 CHIMNEYS AND FIREPLACES

Amend Chapter 10 by creating new, deleting or adding to various sections, as follows:

SECTION R1001 – MASONRY CHIMNEYS

R1001.1 General. Delete any reference to "Seismic Design Category C_{ne} ." Restore the second sentence to read: "In Seismic Design Categories D_1 and D_2 , masonry and concrete chimneys shall be reinforced and anchored as detailed in Section R1003 for chimneys serving fireplaces."

SECTION R1003 – MASONRY FIREPLACES

R1003.3 Seismic reinforcing. Change reference to "Seismic Design Category C_{ne} " to "Seismic Design Categories D_1 and D_2 ."

R1003.4 Seismic anchorage. Restore this section in its entirety. "Masonry and concrete chimneys in Seismic Design Categories D_1 and D_2 shall be anchored at each floor, ceiling or roof line more than 6 feet (1829 mm) above grade, except where constructed completely within the exterior walls. Anchorage shall conform to the requirements of Section R1003.4.1."

R1003.4.1 Anchorage. "Two 3/16-inch by 1-inch (4.8 mm by 25.4 mm) straps shall be embedded a minimum of 12 inches (305 mm) into the chimney. Straps shall be hooked around the outer bars and extend 6 inches (152 mm) beyond the bend. Each strap shall be fastened to a minimum of four ceiling or floor joists or rafters with two ½-inch (12.7 mm) bolts.

CHAPTER 11 ENERGY EFFICIENCY

Delete this Chapter in its entirety and insert the following:

SECTION N1101 PERFORMANCE OBJECTIVE

To provide cost-effective, energy-related requirements for design and construction of the building's thermal envelope and heating-ventilating-air conditioning (HVAC) systems for one- and two-family dwellings. The *Kentucky Prescriptive Method for Insulating Homes Pamphlet* dated January, 2000, may be used in lieu of the provisions of this Chapter.

SECTION N1102 BUILDING THERMAL ENVELOPE

N1102.1 General. The minimum required installed R-value or maximum required U-value for all elements in the building thermal envelope (fenestration, roof/ceiling, opaque -wall, floor, slab edge, crawl space wall, and basement wall) shall be determined by Table 1102.1, based on the building type and the climate zone whore the building is located. Alternative compliance based on heat loss/gain calculations or systems analysis shall comply with Section 1102.

TABLE N1102.1 PRESCRIPTIVE BUILDING ENVELOPE REQUIREMENTS¹

BUILDING LOCATION MAXIMUM U- VALUE		MINIMUM INSULATION ²							
Zone HDD Basement		Fenestration	Roof/	Frame	Mass	Floor Over	Slab Edge	Crawl	
Basemen			Ceiling	Walls ³	Walls	Outdoor Air or Unconditioned Space	4 *	Space Wall	Wall ⁵
1	0-1,499	Any	R-19	R-1 1	R4	R-1 1	R-0	R-0	R-0
2	1,500-2,999	0.90	R-22	R-13	R-5	R-1 3	R-0	R-4	R-0
3	3,000-3,999	0.75	R-26	R-13	R-6	R-1 3	R-4, 2 ft	R-5	R-0
4	4,000-4,999	0.65	R-26	R-13	R-7	R-1 3	R-4. 2 ft	R-8	R-4
5	5,000-6,999	0.55	R-30	R-13	R-8	R-19	R-4, 2 ft	R-8	R-4
6	7,000-8,999	0.45	R-30	R-13	R-8	R-1 9	R-5, 2 ft.	R-8	R-8
7	9,000-12,999	0.40	R-38	R-19	R-14	R-19	R-8, 4ft.	R-10	R-8

Notes:

- a. Building envelopes must also meet air infiltration requirements of Section 803.
- b. Insulation materials shall be installed in accordance with manufacturer's instructions.

- c. The sum of the R-values of cavity insulation and sheathing shall be used to determine the installed R-value.
- d. For slabs that Incorporate heating ducts or pipes in climates above 1,000 HDD, add R-2 to the table values.
- e. The required R-value shall extend down to design frost depth in Zones 4 and 5, and down to the basement floor in Zones 6 and 7.

SECTION N1103 FLOORS

N1103.1 Floors Over Outdoor Air or Unconditioned Areas. Floors over outdoor air or unconditioned areas shall meet the minimum R-value for Floor Over Outdoor Air or Unconditioned Space in Table 1102.1, based on the climate zone where the building is located.

N1103.2 Slabs-on-Ground. Slabs-on-ground, or slabs 12 inches or less below finished grade, shall meet the minimum R-value and depth/width dimension for Slab Edge in Table 1102.1, based on the climate zone where the building is located. The required R-value shall be applied to the exterior or interior of the foundation wall. Exterior insulation shall extend downward from the top of the slab and/or horizontally outward until the distance indicated in Table 1102.1 is reached. Interior insulation shall extend from the top of the slab downward and/or horizontally inward until the distance indicated in Table 1102.1 is reached. All horizontal insulation extending outward from the slab shall be covered by at least 10 inches of soil. The top edge of insulation installed between the exterior wall and the interior slab shall be permitted to be cut at a 45' angle to allow the concrete surface to extend to the wall. Slab edge insulation shall not be required in areas of "very heavy" termite infestation probability.

N1103.3 Walls.

N1103.3.1 Wall Insulation. Opaque walls and band joists exposed to outside air or to unconditioned space shall meet the minimum R-value for Frame Wall or Mass Wall in Table 1102.1, based on the wall type and the climate zone where the building is located. For frame walls, the sum of the R-values of cavity insulation and insulated sheathing shall be used to determine the installed R-value. Walls exposed to unconditioned space shall have an R-value of R-13 when the minimum required R-value for the wall type in Table N1102.1 exceeds R-13.

N1103.3.2 Wood Frame Walls. Where insulated sheathing is used on wood frame walls in areas not otherwise required to have structural sheathing, the entire opaque wall shall be considered to be covered with the insulated sheathing for purposes of determining compliance with the minimum R-value for Frame Wall in Table 1102.1.

N1103.3.3.3 Steel Frame Walls. When steel framing is used, insulated sheathing with an R-value not less than R-2.5 in Zones 3 and 4 (3,000-4,999 HDD), R-5 in Zone 5 (5,000-6,999 HDD) and R-10 in Zones 6 and 7 (7,000-12,999 HDD) shall be installed in addition to the minimum required R-value for Frame Wall in Table 1102.1.

N1103.3.4 Mass Walls. Masonry or concrete walls having a mass greater than or equal to 30 pounds per cubic foot (pcf), solid wood walls having a mass greater than or equal to 20 pcf, and any other

walls having a heat capacity greater than or equal to 6 Btu/ft² F shall be considered mass walls. Mass walls with exterior insulation or mass walls with integral insulation (insulation and mass mixed, such as log walls) shall be permitted to meet the Mass Wall criteria in Table 1102.1 based on the building type and the climate zone where the building is located. The R-value of mass walls with integral insulation shall be based on consideration of all elements of the wall assembly. Other mass walls shall meet the frame wall criteria for the building type and the climate zone where the building is located, based on the sum of the R-values of interior and exterior insulation.

N1103.3.5 Crawl Space Walls. All walls enclosing crawl spaces where the floor above the crawl space is not insulated in accordance with Table 1102.1 shall meet the minimum R-value for Crawl Space Wall in Table N1102.1 based on the climate zone where the building is located. The required R-value shall be applied to the inside or outside of the crawl space wall. The insulation shall extend downward from the sill plate to the level of the inside ground surface.

N1103.3.6 Basement Walls. All basement walls enclosing conditioned space shall meet the minimum R-value for Basement Wall in Table N1102.1, based on the climate zone where the building is located. The required R-value shall be applied on the inside or outside of the basement wall from the sill plate down to the design frost depth in Climatic Zones 4 and 5, and to the basement floor in Zones 6 and 7. Buildings having basement walls with a maximum average exposure not greater than 12 inches above adjacent grade, and having high efficiency equipment meeting the requirements specified in Table N1103.3.6 based on the climate zone where the building is located, are not required to meet the minimum R-value for Basement Wall in Table N1102.1.

TABLE N1103.3.6 EQUIPMENT TRADE-OFF FOR BASEMENT WALL INSULATION

		GAS FURNACE WITH		
BUILDING		CENTRAL		
LOCATION		AIR CONDITIONING	AIR SOURCE HEAT PUMP	
Zone	HDD	Minimum AFUE	Minimum HSPF	
1-3	0 - 3,999			
4-5	4,000 - 6,999	88	7.8	
6-7	7,000 - 12,999	90	8.0	

N1103.3.7 Masonry Veneer. When insulation is placed on the exterior of a slab edge, crawl space wall, or basement wall supporting masonry veneer, the horizontal surface supporting the veneer shall not be required to be insulated.

N1103.3.8 Protection of Foundation Insulation. Exposed insulating materials applied to the exterior of foundation walls shall be protected to prevent degradation of thermal performance. The protection shall extend at least 6 inches below finished grade. Plastic foam insulation used below grade shall comply with ASTM C578.

SECTION N1104 FENESTRATION

N1104.1 Labeling. The U-value of fenestration products (windows and glazed doors) shall be indicated on a label affixed to these products by the manufacturer or, where such values are not indicated, the U-value shall be determined in accordance with Table N1104.1.

TABLE 1104.1 ASSUMED U-VALUE FOR WINDOWS AND GLAZED DOORS

FRAME MATERIAL AND PRODUCT TYPE	SINGLE GLAZED	DOUBLE GLAZED		
Metal Without Thermal Break	1.13	0.70		
Metal With Thermal Break	1.07	0.63		
Reinforced Vinyl/Metal-Clad Wood/				
Wood/Vinyl/Fiberglass	0.90	0.55		

N1104.1.1 Windows. For elements within the building thermal envelope, up to 6 square feet of glazed areas is exempt from the maximum required U-value in Table N1102.1.

N1104.1.2 Skylights. Minimum skylight requirements shall be as follows:

- 1. Zone l (O-1,499 HDD): Any skylight permitted.
- 2. Zones 2-3 (1,500-3,999 HDD): Any double glazed skylight permitted.
- 3. Zones 4 and above (4,000 HDD and above): Any double glazed skylight with a wood, vinyl or fiberglass frame. Metal clad frames shall be permitted.

N1104.1.3 Opaque Doors. Opaque doors shall have a maximum U-value of 0.39 or minimum R-value of 2.5. When the U-value of the door is not provided by the manufacturer, it shall be determined in accordance with Table N1104.1.4. One opaque door per dwelling unit shall be permitted to be exempt from this U-value requirement.

TABLE 1104.1.3
ASSUMED U-VALUE FOR NONGLAZED DOORS

DOOR CONSTRUCTION	WITH FOAM CORE	WITHOUT FOAM CORE	
Steel Doors (1 3/4 inches thick)	0.35	0.60	
Wood Doors (1 3/4 inches thick)	WITHOUT STORM DOOR	WITH STORM DOOR	
Panel	0.54	0.36	
Hollowcore flush	0.46	0.32	
Solid core flush	0.40	0.26	

SECTION N1105 ROOFS AND CEILINGS

N1105.1 Assembly R Values. Roof/ceiling assemblies, including ceilings below unconditioned attics and cathedral ceilings, shall meet the minimum R-value for Roof/Ceiling in Table 1102.1, based on the climate zone where the building is located. Insulation can be compressed or reduced at eaves to accommodate roof framing or ventilation.

Exception: R-30 shall be required for cathedral ceilings whenever the required R-value for Roof/Ceiling in Table 1102.1 exceeds R-30.

SECTION N1106 MOISTURE CONTROL

N1106.1 Vapor Retarder. In all framed walls, floors and roof/ceilings comprising elements of the building thermal envelope, an approved vapor retarder having a maximum rating of 1.0 perm shall be installed on the warm-in winter side of the insulation.

Exceptions:

- 1. Where the insulated cavity or space is ventilated to allow moisture to escape.
- 2. In hot and humid climate areas as shown.

SECTION N1107 AIR INFILTRATION

N1107.1 General. The building envelope shall be designed and constructed to limit air infiltration to the conditioned area of the dwelling. All elements comprising the building thermal envelope, including all exterior joints, seams, or penetrations, shall be caulked, gasketed, taped or covered with moisture vapor permeable sheathing paper or house wrap on the exterior. All windows and doors installed in the building thermal envelope shall be weather stripped, gasketed, or caulked.

SECTION N1108 HVAC SYSTEMS

- **N1108.1 HVAC And Water Heating Appliances.** HVAC and service water heating appliances shall be labeled as complying with minimum efficiency requirements specified by the National Appliance Energy Conservation Act of 1987 and regulations adopted thereunder by the U.S. Department of Energy.
- **N1108.2** Controls. Each heating, cooling, or combination heating and cooling system shall be provided with at least one adjustable thermostat for the regulation of temperature.

N1108.3 Air Handling Duct System.

N1108.3.1 Duct Sealing. All supply and return ducts located outside the building thermal envelope shall have joints sealed with gaskets, mastics, tapes installed in accordance with the manufacturers instructions, or by other approved methods.

N1108.3.2 Duct Insulation. Minimum required duct insulation for all supply and return ducts located in unconditioned spaces shall be R-4 in all climatic zones.

N1108.4 Insulation of refrigerant piping. Refrigerant piping and fittings within a residential building that returns refrigerant to the outdoor unit shall have a minimum pipe insulation thickness of 3/8 inch.

N1109.1 Alternative Compliance.

N1109.1.1 Heat Gain/Heat Loss Calculations. Alternative compliance with the requirements of Table 1102.1 shall be permitted to be determined through a heat gain or heat loss calculation as follows: the required R-value or U-value of an element in the building thermal envelope in Table 1102.1 may be increased or decreased, provided the total heat gain or loss for the entire building does not exceed the total resulting from conformance to the values specified in Table 1102.1.

N1109.2 Systems Analysis. Alternative compliance with the requirements of this chapter shall be permitted to be determined through the use of a systems analysis using a standard design in accordance with Table 1102.1, Section 1107.1 and Section 1108. A proposed design complies with this chapter if it has a projected annual energy use for heating, cooling and service water heating not greater than the energy use bf the standard design, calculated in accordance with accepted engineering practices, Energy use for both homes shall be calculated based on the same assumptions and building location. The standard design shall have the same floor area, envelope component areas, building orientation, glazing orientation, door areas, and building geometry as the proposed design.

CHAPTER 12 MECHANICAL ADMINISTRATION

(No Changes)

CHAPTER 13 GENERAL MECHANICAL SYSTEM REQUIREMENTS

Amend Chapter 13 by creating new, deleting or adding to various sections, as follows:

M1301.1 Scope. Delete "International Fuel Gas Code" and insert "National Fuel Gas Code, 1999 Edition."

M1305.1.1Central Furnaces. Delete "Chapter 17" and insert "National Fuel Gas Code, 1999 Edition."

CHAPTER 14 HEATING & COOLING EQUIPMENT

Amend Chapter 14 by creating new, deleting or adding to various sections, as follows:

M1402.3 Combustion Air. Delete, "Chapter 17" and insert "National Fuel Gas Code, 1999 Edition."

CHAPTER 15 EXHAUST SYSTEMS

(No Changes)

CHAPTER 16 DUCT SYSTEMS

Amend Chapter 16 by creating new, deleting or adding to various sections, as follows:

M1601.1 Duct sizing and Materials. *Amend this subsection to read:* "Supply and return ducts shall be sized according to ACCA Manual D or SMACNA Installation Standards for Residential Heating and Air Conditioning Systems or other approved methods. Duct systems serving heating, cooling and ventilation equipment shall be fabricated in accordance with the provisions of this section."

M1601.2.3 Flexible Duct limitation. Delete this section.

Amend section M1601.3.2 to read as follows: "Metal duct shall be supported by 0.5 inch (12.7mm) wide 18-gauge metal straps of 12-gauge galvanized wire at intervals not exceeding 10 feet (3048 mm) or other approved means. Nonmetallic ducts shall be supported in accordance with the manufacturer's installation instructions including the following requirements:

- 1. Flexible duct shall be supported at manufacturers recommended intervals, but at no greater distance than 5' (1.5m). maximum permissible sag is ½' per foot (42 mm per meter) of spacing between supports.
- 2. A connection to rigid duct or equipment shall be considered a support joint. Long horizontal duct runs with sharp bends shall have additional supports before and after the bend approximately one duct diameter from the center line of the bend.
- 3. Hanger or saddle material in contact with the flexible duct shall be of sufficient width to prevent any restriction of the internal diameter of the duct when the weight of the supported section rests on the hanger or saddle material. In no case will the material contacting the flexible duct be best than 1.5" (38 mm) wide. (No form of tape shall be used for supporting Flex Duct).

- 4. Factory installed suspension systems integral to the flexible duct are an acceptable alternative hanging method when manufacturer's recommended procedures are followed.
- 5. Flexible ducts may rest on ceiling joists or truss supports. Maximum spacing between supports shall not exceed the maximum spacing per manufacturer's installation instruction.
- 6. Support the duct between a metal connection and bend by allowing the duct to extend straight for a few inches before making the bend. This will avoid possible damage to the flexible duct by the edge of the metal collar.
- 7. Vertically installed duct shall be stabilized by support straps at a maximum of 6' (1.8 m) on center.

CHAPTER 17 COMBUSTION AIR

Amend Chapter 17 by creating new, deleting or adding to various sections, as follows:

Delete this Chapter in its entirety and replace with the following:

M1701.1 NFPA 54. The provisions of National Fire Protection Association (NFPA) manual 54 shall apply to all fuel gas, combustion air, chimney, venting and special fuel-burning equipment installations.

CHAPTER 18 CHIMNEYS AND VENTS

Amend Chapter 18 by creating new, deleting or adding to various sections, as follows:

Delete this Chapter in its entirety and replace with the following:

M1801.1 NFPA 54. The provisions of National Fire Protection Association (NFPA) manual 54 shall apply to all fuel gas, combustion air, chimney, venting and special fuel-burning equipment installations.

CHAPTER 19 SPECIAL FUEL-BURNING EQUIPMENT

Amend Chapter 19 by creating new, deleting or adding to various sections, as follows:

Delete this Chapter in its entirety and replace with the following:

M1901.1 NFPA 54. The provisions of National Fire Protection Association (NFPA) manual 54 shall apply to all fuel gas, combustion air, chimney, venting and special fuel-burning equipment installations.

CHAPTER 20 BOILERS/WATER HEATERS

Delete this chapter in its entirety.

CHAPTER 21 HYDRONIC PIPING

Amend Chapter 21 by creating new, deleting or adding to various sections, as follows:

M2101.2 System drain down. Amend the last sentence by deleting the reference to "Chapters 25 through 32 of this code" and replacing with "the Kentucky State Plumbing Code."

M2101.3 Protection of potable water. Amend the end of the sentence by deleting the reference to "Section P2902" and replacing with the language, "the Kentucky State Plumbing Code."

CHAPTER 22 SPECIAL PIPING AND STORAGE SYSTEMS

Delete this Chapter in its entirety.

CHAPTER 23 SOLAR SYSTEMS

Amend Chapter 23 by creating new, deleting or adding to various sections, as follows:

M2301.5 Backflow protection. Amend the end of the sentence by deleting the reference to "Section P2902.4.5" and replacing it with the language, "the Kentucky State Plumbing Code."

CHAPTER 24 FUEL GAS

Delete this Chapter in its entirety.

Chapters 25 through 32 of the IRC. Plumbing Chapters. *Delete all existing sections and subsections and insert the following:*

CHAPTER 25 PLUMBING SYSTEMS

P2501.1 Kentucky State Plumbing Code. "The provisions of this chapter and the Kentucky State Plumbing Code shall govern the erection, installation, alteration, repairs, relocation, replacement addition to, use or maintenance of plumbing equipment and systems. Plumbing systems and equipment shall be constructed, installed and maintained in accordance with the Kentucky State Plumbing code, including all fees and licensing requirements. Private Sewage disposal systems shall conform to 902 KAR 10:081 and 10:085.

P2502.1 Anchorage of Water Heaters in Seismic Design Category Cne. "In Seismic Design Category Cne, all water heaters shall be anchored or fastened to resist horizontal displacement due to earthquake motion as provided in Section M1307.2."

CHAPTER 26 SWIMMING POOLS

P2601.1 General. Swimming and bathing pools shall conform to the requirements of this section, provided that these regulations shall not be applicable to any such pool less than 24 inches (610 mm) deep or having a surface area less than 250 square feet (23.25 m2), except where such pools are permanently equipped with a water-recirculating system or involve structural materials. For the purpose of *this code*, pools are classified as private swimming pools or public swimming pools, as defined in Section 419.2. Materials and constructions used in swimming pools shall comply with the applicable requirements of *this code*.

P2601.2 Definitions. The following words and terms shall, for the purposes of this section and as used elsewhere in *this code*, have the meanings shown herein.

Pools, Swimming, Hot Tubs And Spas

Barrier. A fence, a wall, a building wall, or combination thereof, which completely surrounds the swimming pool and obstructs access to the swimming pool.

Hot Tub. See definition of private swimming pool.

In-Ground Pool. See definition of private swimming pool.

Power Safety Cover. A pool cover, which is placed over the water area, and is opened and closed with a motorized mechanism, activated by a control switch.

Private Swimming Pool. Any structure that contains water over 24 inches (610 mm) deep and which is used, or intended to be used, for swimming or recreational bathing in connection with a home which is available only to the family and guests of the householder. This includes swimming pools constructed below grade on site, but not those assembled above grade on site.

Private Swimming Pool, Indoor. Any private swimming pool that is totally contained within a private structure and surrounded on all four sides by walls of said structure.

Private Swimming Pool, Outdoor. Any private swimming pool that is not an indoor pool.

Public Swimming Pool. Any swimming pool constructed below grade on site, which is not a private swimming pool.

Spa. See definition of private swimming pool.

P2601.3 Permits, pool occupant load calculations and construction documents. A swimming pool or appurtenances thereto shall not be constructed, installed, enlarged or altered until construction documents have been submitted and a permit has been obtained from the code official having jurisdiction. The occupant load calculations of Section P2601.3.1 shall be used for the purpose of determining the jurisdiction and design professional seal requirements. The approval of all city, county and state authorities having jurisdiction over swimming pools shall be obtained before applying to the code official for a permit. Certified copies of these approvals shall be filed as part of the supporting data for the permit application.

P2601.3.1 Pool occupant load calculations. The occupant load of the swimming pool, appurtenances and accessory structures shall be computed at a rate of one occupant per unit of area as prescribed by this section.

Table P2601.3.1 POOL OCCUPANT LOAD

Occupancy	Net area in square feet Per occupant
Non-swimmer area	10
(5 feet or less water depth) Swimmer area	
(Greater than 5 feet of water depth Note: Subtract 300 square feet for Each diving area.	24
Bathhouse & sunbather area (In excess of 8 feet wide deck)	25

P2601.3.2 Construction documents. Construction documents shall accurately show dimensions and construction of the pool and appurtenances and properly established distances to lot lines, buildings, walks and fences, as well as details of the water supply system, drainage and water disposal systems, and all appurtenances pertaining to the swimming pool. Detailed construction documents of structures, vertical elevations and sections through the pool showing depth shall be included.

- **P2601.4 Locations.** Private swimming pools shall not encroach on any front or side yard required by *this code* or by the governing zoning law, unless in accordance with specific rules of the jurisdiction in which the pool is located. A wall of a swimming pool shall not be located less than 6 feet (1829 mm) from any rear or side property line or 10 feet (3048 mm) from any street property line, unless in accordance with the specific rules of the jurisdiction in which the pool is located.
- **P2601.5 Structural design.** The pool structure shall be engineered and designed to withstand the expected forces to which the pool will be subjected.
 - **P2601.5.1 Wall slopes.** To a depth up to 2 feet 9 inches (838 mm) from the top, the wall slope shall not be more than one unit horizontal in five units vertical (1:5).
 - **P2601.5.2 Floor slopes.** The slope of the floor on the shallow side of the transition point shall not exceed one unit vertical to seven units horizontal (1:7). For public pools greater than 1,200 square feet (111.6 m²), the slope of the floor on the shallow side of the transition point shall not exceed one unit vertical to ten units horizontal (1:10). The transition point between shallow and deep water shall not be more than 5 feet (1524 mm) deep.
 - **P2601.5.3 Walkways.** All public swimming pools shall have walkways not less than 4 feet (1219 mm) in width extending entirely around the pool. Curbs or sidewalks around any swimming pool shall have a slip-resistant surface for a width of not less than 1 foot (305 mm) at the edge of the pool, and shall be so arranged as to prevent return of surface water to the pool.
 - **P2601.5.4 Steps and ladders.** At least one *means of egress* shall be provided from private pools. Public pools shall provide ladders or other *means of egress* at both sides of the diving section and at least one *means of egress* at the shallow section; or at least one *means of egress* in the deep section and the shallow section if diving boards are not provided. Treads of steps and ladders shall have slip-resistant surfaces and handrails on both sides, except that handrails are not required where there are not more than four steps or where the steps extend the full width of the side or end of the pool. Treads and risers of the pool steps shall conform to the following:
 - 1. Step treads shall have a minimum unobstructed horizontal depth of 10 inches (254 mm) and a minimum unobstructed surface area of 240 square inches (0.15m²).
 - 2. Risers shall have a maximum uniform height of 12 inches (305mm) as measured at the centerline of the tread. The height of the bottom riser shall not vary more than plus or minus 2 inches (51mm) from the uniform riser height.
- **P2601.6 Water supply.** All swimming pools shall be provided with a potable water supply, free of cross connections with the pool or its equipment.
 - **P2601.6.1 Water treatment.** Public swimming pools are regulated by the Cabinet for Health Services, Department of Public Health, for purposes of water distribution and treatment systems and the proper operation and maintenance of all pool facilities (see 902 KAR 10:120, Kentucky Public Swimming and Bathing Facilities Regulation). Private swimming pools shall be designed

and installed so that there is a pool water turnover at least once every 18 hours, Filters shall not filter water at a rate in excess of 5 gallons per minute per square foot (205L/min/m²) of surface area. The pool *owner* shall be instructed in the care of maintenance of the pool by the supplier or builder, including treatment with high-test calcium hypochlorite (dry chlorine), sodium hypochlorite (liquid chlorine) or equally effective germicide and algicide and the importance of proper pH (alkalinity and acidity) control.

P2601.7 Appurtenant structures. All appurtenant structures, installations and equipment, such as showers, dressing rooms, electrical equipment, equipment houses or other buildings and structures, including plumbing, heating and air conditioning systems, shall comply with all applicable requirements of *this code*, including Chapter 41.

P2601.7.1 Accessories. All swimming pool accessories shall be designed, constructed and installed so as not to be a safety hazard. Installations or structures for diving purposes shall be properly anchored to insure stability.

P2601.8 Equipment installations. Pumps, filters and other mechanical and electrical equipment for public swimming pools shall be enclosed in such a manner as to provide access only to authorized persons and not to bathers. Construction and drainage shall be arranged to avoid the entrance and accumulation of water in the vicinity of electrical equipment.

P2601.8.1 Protection of heating equipment. Gas appliances located in rooms or spaces where corrosive or flammable chemicals are present shall be protected in accordance with Section 5.1.6 and 6.22.1 of NFPA 54.

P2601.9 Enclosures for public and private swimming pools. Public and private swimming pools shall be provided with an enclosure surrounding the pool area. The enclosure shall meet the provisions of Sections P2601.9.1 through P2601.9.3.

P2601.9.1 Enclosure. The enclosure shall extend not less than 4 feet (1219 mm) above the ground. All gates shall be self-closing and self-latching with the latches placed at least 4 feet (1219 mm) above the ground.

Exception. The following shall be exempt from the provisions of this section:

- 1. A spa or hot tub with an approved safety cover.
- 2. Fixtures that are drained after each use.

P2601.9.2 Approved barriers. Barriers shall be designed so as to prevent uninvited persons from intruding into the pool area. Enclosures shall be designed to withstand a horizontal concentrated force load of 200 pounds (896 N) applied on a 1-square-foot (0.093 nf) area at any point of the fence enclosure. Compliance with the following criteria shall constitute a safe barrier:

- 1. The top of the barrier shall be at least 48 inches (1219 mm) above the finished ground level when measured on the side of the barrier, which faces away from the swimming pool. The maximum vertical clearance between the finished ground level and the barrier shall be 2 inches (51 mm) measured on the side of the barrier, which faces away from the swimming pool.
- 2. Openings in the barrier shall not allow the passage of a 4-inch (102-mm) diameter sphere.

- 3. Solid barriers shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.
- 4. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is less than 45 inches (1143 mm), the horizontal members shall be located on the swimming pool side of the barrier. Spacing between vertical members shall not exceed 1 3/4 inches (44 mm) in width.
- 5. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is more than 45 inches (1143 mm), spacing between vertical members shall not exceed 4 inches (102 mm). Decorative cutouts shall not exceed 1 3/4 inches (44 mm) in width.
- 6. Maximum mesh size for chain link fences shall be a 1 ¼ inch (32 mm) square unless the fence is provided with slats fastened at the top or the bottom which reduce the openings to not less than 1 ¾ inches (44 mm).
- 7. Where the barrier is composed of diagonal members, such as a lattice fence, the maximum opening formed by the diagonal members shall be not more than 1 ¾ inches (44 mm).

P2601.9.3 Private swimming pool enclosures.

- 1. An indoor private pool enclosure may consist of the walls of the house including any entrance and exit doors, screens or glass separations designed for the purpose of preventing uninvited persons from entering the pool.
- 2. An exterior private pool enclosure may surround the pool area only or it may surround a larger area if the barrier prevents uninvited persons from entering the pool.

P2601.10 Diving boards. Minimum water depths and distances for diving hoppers for pools, based on board height above water, shall comply with Table 419.10(1) for public pools and Table 419.10(2) for private pools.

The maximum slope permitted between point D_2 and the transition point shall not exceed one unit vertical to three units horizontal (1:3) in private and public pools. D_1 is the point directly under the end of the diving boards D_2 is the point at which the floor begins to slope upwards to the transition point (see Figure P2601.10).

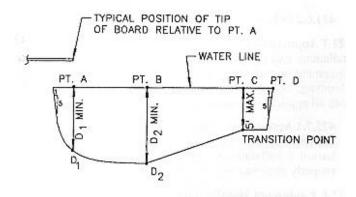


Figure P2601.10 MINIMUM WATER DEPTHS AND DISTANCES BASED ON BOARD HEIGHT FOR PUBLIC AND PRIVATE POOLS

Board Height	Minimum depth ^a	Distance ^a	Minimum
	at D₁ directly	Between	depth ^a at D ₂
	under end	D ₁ and D ₂	
	of board		
1'8 (1/2 meter)	6'0"	7'0"	7'6"
2'2" (2/3 meter)	6'10"	7'6"	8'0"
2'6" (3/4 meter)	7'5"	8'0"	8'0"
3'4" (1 meter)	8'6"	9'0"	9'0"

Note a. 1 foot = 304.8 mm.

CHAPTER 33 GENERAL REQUIREMENTS

Amend Chapter 33, Page 315, of the Kentucky Residential Code under the heading entitled "General Requirements" to read as follows: "To the extent anything contained in Chapters 33 through 42 may conflict with the provisions of the 2002 edition of the National Electrical Code, the latter shall control.

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CHAPTER 34 ELECTRICAL DEFINITONS

(No changes)

CHAPTER 35 SERVICES

(No changes)

CHAPTER 36 BRANCH CIRCUIT AND FEEDER REQUIREMENTS

(No changes)

CHAPTER 37 WIRING METHODS

(No changes)

CHAPTER 38 POWER AND LIGHTING DISTRIBUTION

(No changes)

CHAPTER 39 DEVICES AND LIGHTING FIXTURES

(No changes)

CHAPTER 40 APPLIANCE INSTALLATION

(No changes)

CHAPTER 41 ELECTRICAL EQUIPMENT FOR SWIMMING POOLS

(No changes)

CHAPTER 42 CLASS 2 REMOTE-CONTROL, SIGNALING AND POWR-LIMITED CIRCUITS

(No changes)

CHAPTER 43 REFERENCED STANDARDS

Amend Chapter 43 by creating new, deleting or adding to various sections, as follows:

Under "ICC" delete reference to "IBC" and replace with "Kentucky Building Code/2002" Delete reference to "ICCEC" and replace with "National Electrical Code" Delete reference to "IFGC" and replace with "National Fuel Gas Code, 1999" Delete reference to "IPC" and replace with "Kentucky State Plumbing Code"

Under "NFPA" add reference to "NFPA 54-99, National Fuel Gas Code" Amend edition date to standard 13 to 1999; Amend edition date of standard 72 to 1999

Amend page 391 of the Kentucky Residential Code under the section entitled NFPA, standard reference number, to read as follows: "NFPA 70-02 National Electric Code".; and "NFPA 259-98".

APPENDICES A THROUGH K

Delete Appendices in their entirety